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Drawing affidavit of Mr. Marrack in support of injunction to restrain this action, also folios 4. 0 4 0

Engrossing, 1s. 4d.; attending to swear same, 6s. 8d.; paid swearing, 1s.; paid filing, 1s. 0 10 0

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Service on Mr. Chilcott ... 0 2 6

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18—Writing agents in London, instructing them to bespeak room at Law Institution for hearing of petition ... 0 3 6

19—Agents attending bespeaking room accordingly ... 0 6 8

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Similar institutions in the larger continental capitals have invariably proved a success; whilst the Brighton and Crystal Palace Aquaria—both of which are good paying dividends—may be specially pointed to as very successful in a like enterprise in this country. The £10 shares of the Brighton Aquaria will be held every afternoon and evening. The band will rank second in the world. Special concerts (vocal and instrumental) will be held every Sunday, at which the most eminent and favourite artists will appear. Performances of an attractive and varied character will also take place on stated days; and an annual grand concert will be given.

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this unfortunate catastrophe, and spare no time or expense in having their boilers properly strengthened where required. HENRY T. FERGUSON,
District Locomotive Superintendent South Devon and Cornwall Railways.

Original Correspondence.

THE CAPE COPPER MINING COMPANY.

SIR.—It is to be hoped the directors will profit by the discussion which took place at the meeting, and see the necessity of providing some means for supplying the trading capital required, without having to obtain advances on the ore and bills of lading, &c. The amount charged in the accounts for 1873 for interest, discounts, &c., is 9000*l.*, notwithstanding the low rates prevailing for money. What would this item have amounted to had money been dear—say, 5 to 7 per cent., as it was not long ago? Why, at least 15000*l.*, or more. The company's indebtedness, or floating liabilities, amounting to 160,000*l.*, must be a continued source of danger; and the reserve fund not being invested, but being used for the trading purposes of the company, is practically no reserve fund. Now, the question arises, Do the Articles of Association authorise the directors to incur this large mass of debt, and to employ the reserve fund as is being done, instead of investing it in tangible securities?

The Chairman laboured hard to make it appear there was no immediate fear of a reduction in the dividend, although he admitted that with the increased raisings of ore the profits were only sufficient to pay about 3*l.* 5*s.* instead of 4*l.* per share per annum. I cannot help thinking the sounder course would have been to have at once stated the dividend would be regulated by the profits of each year, and that the practice of eking it out from extraneous sources would be discontinued. The decline in the price of shares since the meeting proves there is an uneasy feeling amongst the holders, the fall having been occasioned by *bona fide* and not speculative sales. When shares are selling at the high price of Cape Copper—26*s.* equal to 530,000*l.* for the mine—there is room for serious depreciation should anything occur by which the dividends are rendered less certain. The sources from which the dividend was hoped to be maintained were considered to be an increased production of ore, and higher prices for it. Now, the expenses of working and managing this mine are so enormous that an increased economy in the expenditure seems as likely a source as either of the others for maintaining the dividends, for it is to be feared a rise in the price of copper is far distant, and it would scarcely be prudent to increase the raisings over 750 tons per month, unless additional facilities for its transport to the coast are first obtained. Would it not, therefore, be better for the directors to reduce the expenditure, which doubtless could be done without in any degree retarding the development of the mine?

July 16. — A SHAREHOLDER.

FLAGSTAFF AND TECOMA COMPANIES.

SIR.—Under the management of the new directors the affairs of these two companies seem going from bad to worse—the 10*s.* shares are now 3*l.* to 2*l.* 10*s.*, and are likely to become valueless. At the first meeting of Flagstaff shareholders under the new *regime*, the new Chairman, Mr. White, told them that it was absolutely necessary to come to terms with Mr. Davis, the mortgagee in possession, that if they would not try to do this all the new directors would resign. Accordingly it was agreed that this should be attempted. Month after month has gone by, and then at another meeting we are told that the attempt has not yet succeeded, that the majority of the new board being now in favour of "War to the knife" with Mr. Davis, Mr. White had resigned, a new Chairman had been appointed, and this new Chairman and the other directors tried hard to persuade the shareholders to adopt a resolution which was a declaration of war. On the other hand, Sergeant Sleigh, Mr. Staples, and others told them that such a course was ruin to them, and only profitable to the lawyers, as Mr. Davis was living in Paris out of reach of Chancery proceedings, and could and would, if attacked, sell the mine, when it would not produce enough to pay his enormous claim, not only for money advanced, but for ore sold to him paid for, but not yet claimed, and the shareholders would be nowhere. The result was that an overwhelming majority negatived the proposal of the directors, passed a resolution asking Mr. White to return, and in favour of a treaty with Mr. Davis. Later on another meeting was announced. We are told that Mr. White will not return; and then the meeting takes the matter out of the hands of the incompetent directors, and determine to send three shareholders over to Paris to Mr. Davis to see what can be done; of course, Mr. Davis sees he has the thing in his own hands, and can do as he pleases; and of course also the new directors, if they have any spirit, will after two such rebuffs at once resign.

In the case of the Tecomá Company I have just got a circular, the substance of which is that the new directors (closely connected with the new directors of the Flagstaff) have been for months negotiating with Mr. Davis, that they now abandon the attempt in despair, and have already declared war by commencing legal proceedings against him. The difference is that they do not call the shareholders together to determine if this shall be done; and the reason is obvious—they knew they should be beaten by them, as the Flagstaff directors have twice been; so the end of it will be, as Sergeant Sleigh, himself a lawyer, said, "What little we have left will go in law."—July 17.

A SHAREHOLDER IN BOTH COMPANIES.

GLANSEVERN MINE.

SIR.—In accordance with the invitation of the secretary, I called at the offices of this company to inspect the specimens of ore taken by the manager from the lode in the 12 ft. level below adit. The stones of ore are as pretty as any miner could wish to see, having well defined faces or walls, which make them appear to come out of a fine leader of ore about 1 in. wide. In fact, it has seldom been my pleasure to see finer ore taken from so shallow a depth.

There can be no doubt that as the level is extended under the great bunch of ore cut in the adit that the lode will still further improve, and become richer than ever. Altogether, the future of this little mine could not be more promising.

London, July 17. — A SHAREHOLDER.

[For remainder of Original Correspondence see this day's Supplement.]

EAST POOL MINING COMPANY.

This mine, hitherto one which has had but an uphill battle to fight, would seem now to be approaching the dawn of its prosperity, and to speculators presents a most advantageous investment. As a tin and copper mine it is looking extremely well, and many of the points which are now being worked bid fair to be of a most productive character; indeed, so well are they now returning ore that at the two-monthly meeting, on Monday, there was declared a balance of 31*s.* in favour of the concern. But the ore raised are not the only sources of its income. East Pool makes its wolfram with tungstate of soda. It so happens that this mineral is the chief property used in the solution of Dr. Jones for the rendering of wood uninflammable, and as there is every probability of that solution becoming most valuable and generally used, a great source of revenue will thus be opened up to the undertaking, and the mine made one of the most important in the county. The meeting of Monday was presided over by Mr. Dennis, and the accounts showed that the labour costs for February and March amounted to 263*s.* 4*d.* 2*s.*, and the total expenditure, inclusive of merchants' bills and lord's dues, to 429*s.* 1*s.* 4*d.* The total receipts were 471*s.* 11*s.* 8*d.*, and a balance of 41*s.* 16*s.* 4*d.* was thus shown on the two months' working. Standing against the mine there was a balance of 92*s.* 1*s.* 10*d.*, and deducting this from the profits a balance of 31*s.* was left, and this the committee of management proposed should be carried in reduction of the suspense account.

The CHAIRMAN characterised that day's accounts as being of a most satisfactory character. They had been waiting a long time for a more prosperous state of affairs to set in, and at last they had been enabled to show a favourable balance. And he might say—after going into particulars most carefully—that they would be enabled to show a much better profit at the next account, and that all forthcoming accounts would present most favourable and still larger profits. One great thing was the near completion of that which they had been anxiously expecting for years, not months only, and that was to communicate the 130 with the 180. They thus hoped to complete before the next account. Unquestionably the agents—and most of them had got pretty well out of heart in waiting so long—had now surmounted their difficulties: their prospects were exceedingly good, and it must be pleasing to them all to know that their undertaking was in such an improved condition.—Mr. TREGLAWN did not exactly see how the profit could be increased upon by the time of their next meeting.—The CHAIRMAN explained that their coal bill would be less, all their other bills were decreasing, the mine was improving, and there was altogether every probability of increased returns.

Mr. BROAD added that beyond that there was one of the productions of the mine which were long would materially add to its returns. Although it was evident, perhaps, that they got a less price for their tin than some other mines where there was no mixture of wolfram, yet when they saw the amounts now being carried to their credit for tungstate, arsenic, &c., they thought they could not be other than satisfied. From those sources they obtained considerable revenue, and there was every probability of its being considerably augmented. The introduction of wolfram for the rendering of wood uninflammable had recently been introduced, and this to them was most important. They had been several experiments made, two under the direction of the Government in the Devonport Dockyard, and these had given satisfaction as far as they had gone. Other experiments would be carried out, but there was already every reason to believe that the application of the solution had a beneficial effect and retarded fire, and that it ultimately would be adopted by the Admiralty for a variety of purposes. Tungstate of soda entered very materially into the solution, and they would see how likely they were to be benefited by the discovery, and by the introduction into general use of the solution. He had had a slight conversation with Dr. Jones in regard to whether he had anything more substantial to rely upon than East Pool for the supply of the mineral, and what he would do if their supply of wolfram came to an end. Dr. Jones replied that in the event of such he should have to adopt another. What that was he did not know, but he believed it came from Norway. At all events, so long as they were able to supply the necessary wolfram they would have the full benefit of the demand. It was stated that the tungstate of soda now produced by the mine was sold at 9*s.* per ton.—Mr. HARRIS had no doubt, if the mineral was put to the use referred to it

would very materially increase in value. They might in time come to make 50*s.* a ton of it, and so he would not be now too ready to effect sales at present prices.—*Western Daily Mercury.*

THE RAILROADS OF THE UNITED STATES.

So large a number of British capitalists are interested in American Railways that "Poor's Manual" several previous annual volumes of which have been noticed in the *Mining Journal*, has become very extensively known in this country, and the seventh edition, just issued, is in every respect calculated to maintain its reputation. It cannot be doubted that in extent and accuracy of information it is superior to any preceding number, owing to the greater readiness of railroad companies to supply information, and the more complete returns made by them to their Legislatures in those States where they are required. The returns not being for similar periods in all the States, the Editors are frequently compelled to apply to the companies for later and more full information than is supplied in their legislative returns. In former years there was much difficulty in collecting these particulars, but a great change for the better has taken place. Stock and bond holders are now everywhere looking after their investments, and great reforms have been effected, even where the parties managing them have not been displaced. The recent financial revolution, which may be followed by decreased earnings for a time, will be a powerful motive to a higher standard of service, and a more economical management. The table showing the progress of railroad enterprise in the United States is particularly interesting. In 1830 there were but 23 miles of railroads in operation, and ten years afterwards 2818 miles, whilst in 1850 there were 9021, the increase being pretty constant and rapid, so that in 1873 there were no less than 70,651 miles in operation. The greatest annual increase of mileage was in 1871, when 7660 miles were added, a length more than equal to all the railroads in operation in the United States in 1849. The railroads in the Western States are longer than those of the Middle, Southern, and the Pacific States combined, and the New England States have 5314 miles.

In the last five years 28,396 miles of railroads were constructed. At \$50,000 per mile the cost has been \$1,381,850,000. In the meantime \$75,000,000 have been annually expended in enlarging the accommodations and increasing the facilities for business of roads already in operation—in other words, there has been expended upon the American railroads \$350,000,000 annually in the past five years. If they have not exceeded their means in the construction of these works they have pushed this great interest out of all proportion to others. They have only to stop construction to have the equilibrium speedily restored. The method is a very simple one. The earnings of the railroads of the Western States the past year equalled \$14,43 per head of population. The present year, but for the effect of the recent panic, they would equal \$15,33 per head, and in 1875 it would be \$16,33. This gain is certain to be made as soon as the country recovers from the present prostration. In the meantime, population is increasing at the rate of more than one million annually. The contribution of this increase alone to railroads will add at the present rate of earnings \$14,330,000 annually to their gross receipts. But the population of the country increases at the rate of about 2.50 per cent. annually, whilst the earnings of the railroads increase in about fivefold greater ratio. The question of earning is one of population, the pioneer contributing as much per head as a citizen of old and densely settled states.

The Manual, which extends to about 950 pages, and supplies the business details, considered from the capitalist's point of view, of some 1600 railroads, is as complete as need be desired, for whether the shareholder or intending investor desires information as to the mileage, cost, organisation, traffic, earnings, expenses, shares, bonds, or financial condition of a given railroad they will find it without trouble in the volume now placed at their disposal. In connection with American railroads "Poor's Manual" will prove an invaluable acquisition to the capitalist and to men of business generally.

* "Manual of the Railroads of the United States for 1874-75." By HENRY V. POOR. Seventh Series.—New York and London: H. V. and H. W. Poor.

PERUVIAN SECURITIES.—A rabid article on Peru is given in the July Circular of Messrs. Tallantre and Co., the object apparently being to depress Peruvian securities and calumniate certain individuals who have interested themselves in South American matters. The hope is expressed that the new guano deposit will not impose on anyone. Their existence, it is said, may, indeed, be doubted, unless Peruvian guano-finding is hereafter to be regarded in the light of lead lodes in Wales or tin lodes in Cornwall. Then, it is not to be concealed that Peru, in common with its sister republics, has a population divided by two hard lines—the narrow, dandy Spanish class, who smoke all day, administer local and imperial affairs, and spend the taxes; and the foreign class, as the English, German, and Italian merchants and residents, who carry on the business of the republic, but carefully abstain from taking any part in public affairs lest they should be liable for military service, and for other inconveniences that devolve on citizens. The English in Peru takes no part in public affairs; and, on the other hand, it might be said that the Peruvian in Peru takes no part in commerce, nor in industry, nor in anything save what ministers to the pleasure of the moment. The foreign class here referred to have realised enormous fortunes from their connection with South America, and it is unfair to argue that as stock has been thrown upon the market because a large holder's "heirs and executors have not inherited the South American sympathies and money-making mania of their ancestor, the whole class of investments which made his fortune should be avoided.

GEOLOGICAL SOCIETY OF LONDON.

Mr. Clarence King, Director of the United States Geological Survey of the 40th parallel, Lafayette-place, New York; S. F. Emmons, Chief Geologist of the United States Geological Survey of the 40th parallel; and Mr. Joseph Garland, of Limburg, were elected Fellows of the Society. The following are some of the papers read:—

Note on the Binger Diamond Fields. By Arch. Liversidge, F.G.S. The author commenced by describing the general characters of the older Australian diamond field of the Mudgee or Cudgong district. The Binger diamond field is situated in a basin among the mountains of the Drummond range, the encircling hills being of carboniferous or Devonian age. The dimantiferous drift occurs in patches in the basin, which is invaded by spurs of basalt. The rock under the drift is an argillaceous shale, and here and there are outcrops of a siliceous conglomerate. The diamonds have hitherto been worked only at the surface. The author mentions the principal minerals found associated with the diamonds, which are generally small, and their crystalline forms not very well developed. He also remarks on the general accordance in the geological constitution of various dimantiferous districts.

Note upon a Recent Discovery of Tin Ore in Tasmania. By Chas. Gould, B.A., F.G.S. In this paper the author states that the ore has been found in large masses *in situ*, and that the containing rock is lithologically distinct from the ordinary ternary granite which forms the whole of the stanniferous country of Queensland. The discovery was made at Mount Bischoff, in the north-west portion of Tasmania, but as the district is covered by scrub an exact estimate of the exposed area of stanniferous rock is as yet impossible. It does not appear to exceed a few hundred acres. Large quantities of stream tin have been already obtained.

The Hematite Deposits of Whitehaven and Furness. By J. Kendall, F.G.S. The deposits of hematite occur in the Silurian and carboniferous rocks, but chiefly in the latter, and nearly all those worked in the two districts are found in the mountain limestone. They occur at all levels in the limestone, and generally near faults; their dip is the same as that of the beds in which they lie. Their natural variety at the two localities. The Whitehaven hematite is much more compact than that of Furness. In the latter place it contains fossils from the carboniferous limestone. The author considers the hematites to have been deposited by water, coming probably from the coal measures, containing bicarbonate of iron. The author believes that they were probably deposited after the millstone grit, but before the Permian.

Notes on the Physical Characters and Mineralogy of Newfoundland. By John Milne, F.G.S. In this paper the author described in considerable detail the physical characters of the island of Newfoundland with regard to its surface configuration and coast outline, the traces of ice-action displayed in it, and its mineral resources. The details of the latter are given under the heads of the various localities visited by the author.

SUB-WEALDEN EXPLORATION.—The seventh quarterly report, just published, says that since the last report, dated March 28, 329 ft. have been bored. The greatest weekly progress has been 86 ft., and the total depth attained 1018 feet. Mr. Willett, the hon. secretary, says:—

"The fossils for the last 50 ft. indicate that we have passed insensibly into the Oxford clay. The Palaeozoic ridge of rocks which we are seeking was probably a submerged reef in the muddy waters which deposited the thick beds of clay we are now traversing. We expect to come down suddenly upon it, and it may be only a few feet beneath us; it may, however, be some hundred feet. Whatever be the distance, the chance of discovering its actual depth seems to be now or never. If we were directly seeking for coal the question would evidently be one for the adjoining landowners. It is very simply an ordinary scientific experiment. It might be left to those specially interested in the subject. But our object is to obtain information which, while it must certainly increase our scientific knowledge, may confer an incalculable benefit on large areas in which mineral wealth is at present an unknown quantity. None of our supporters have subscribed with the idea of any personal gain whatever; and it is to minds thus constituted, who will give 'hopes' for nothing again, that we must look for help to finish our work. The Diamond Company have consented, at less than half their published tariff,

to endeavour to bore 200 feet more at 2*l.* per foot, solely on the ground that it is a scientific and not a commercial undertaking, and by the aid of their superior machinery and appliances we have now a better prospect of boring 2000 feet than we had of boring 1000 feet under the old system."

Subjoined is an elaborate report by Mr. W. Topley, F.G.S., Assoc. Inst.C.E., Geological Survey of England, giving minute particulars of the enterprise, and correcting some few errors which occurred in previous reports. He says:—

"The Kimmeridge clay probably began at about 200 ft.; if it continued to nearly 900 ft. (as is probably the case) we should have a thickness of nearly 700 ft. The me that he has long believed it to have been much under-estimated. Near Rouen it has been proved to be about 1000 feet thick. From the orderly bedding of the clay, from the absence of any subordinate beds of sandstone, as well as from the position in the deeper part of the Kimmeridge clay sea. But Mr. Gwyn Jeffreys, who has looked over the fossils, informs me that, judging from their nearest living analogies, they must all have lived in comparatively shallow water, probably exceeding 50 fathoms."

He adds a list of fossils found in the Kimmeridge clay during the boring. Since the last report the hon. secretary acknowledges the receipt of 289*s.* 18*s.* in various sums, including 50*s.* each from the Earl of Ashburnham and Mr. G. Cubitt, M.P., Mr. Willett has himself given a fourth donation of 100*s.* The late appeal for additional funds has produced 178*s.* 10*s.*, including 50*s.* from Mr. C. Cochrane, Stourbridge, and 30*s.* from Mr. C. W. Siemens, Kensington. Mr. Thos. Warner, of Brighton, has promised 300*s.* if the boring is continued to a depth of 2000 ft. In concluding his report, the hon. secretary says the labour and anxiety of the undertaking have been greatly beyond his expectations, and from failing health he would be very thankful to be relieved from the duties involved. Under any circumstances he cannot consent to continue them beyond the end of the current year. By that time, if requisite funds can be obtained, Palaeozoic rocks, or Sub-Wealden Exploration will have been accomplished—a consummation devoutly to be wished.

Registration of New Companies.

The following joint-stock companies have been duly registered:—

GREAT BRITAIN MUTUAL GUARANTEE AND ACCIDENT ASSOCIATION (Limited).—Capital 50,000*s.*, in shares of 2*l.* 10*s.* each. To carry on the general business of a guarantee association. The subscribers (who take 10 shares each) are—R. R. Torrens, 12, Chester-place; T. C. Simons, Highgate road; B. C. Hargreaves, 14, Bishopsgate Within; R. G. Macdonald, C.B., Atheneum Club; D. L. Scholberg, Haoverstock Hill; J. Wright, 22, Great Winchester-street; C. Lee, Bilton; and E. P. Rowsell, 60, Gracechurch-street.

THE TRANSVAAL AND SOUTH AFRICAN LAND TRUST (Limited).—Capital 180,000*s.*, in 1*s.* shares. To acquire land in the Transvaal Republic, Natal. The subscribers (who take one share each) are—H. Broughton, Berkely square; F. Braby, Mount Henley, Sydenham Hill; J. Ridsdale, Royal Mint; J. Berthelot, 84, Lombard-street; G. H. Kimber, 79, Lombard-street; A. Kimber, 25, Cornhill; and D. H. Wilson, Oxford and Cambridge Club.

THOMSON, SISTERNE, AND COMPANY (Limited).—Capital 50,000*s.*, in 10*s.* shares. To take over the business of Thomson and Co., of 64, Victoria street, S.W., patentees of carriage springs. The subscribers (who take one share each) are—W. S. Thomson, 64, Victoria-street; L. Sterne, 9, Victoria Chambers, S.W.; J. B. Handyside, Glasgow; W. Townsend, 9, Victoria Chambers; H. Meek, 97, Cheapside; H. A. Lyman, 97, Cheapside; and W. Wilson, 79, Lombard-street.

CROWN COTTON SPINNING AND DOUBLING COMPANY (Limited).—Capital 50,000*s.*, in 5*s.* shares. To carry on a cotton spinning business at Bolton. The subscribers are—George Atkins, Lee, near Manchester, 200; S. L. Hawell, Lees, 200; J. Lumley, Ashby Bridge, near Bolton, 200; J. Swindells, Lee, 200; C. Shaw, Lee, 10; J. Grimbaldy, Bolton, 20; A. H. Wadsworth, Bolton, 20.

MIDDLESEX FIRE OFFICE (Limited).—Capital 2000*s.*, in 1*s.* shares. To transact the general business of a fire insurance company.

GWIAZDA CAE GURWEN COLLIERY COMPANY (Limited).—Capital 75,000*s.*, in 50*s.* shares. To carry on business as coalowners and ironmasters. The subscribers are—A. G. Harris, Rotherham; W. Kirchingman, Rotherham,

capital of 200,000*l.* is offered for subscription, in 40,000 shares of *5l.* each, *1l.* to be paid on application and *1l.* on allotment. The privilege of a life admission (personal or for a nominee) is accorded to subscribers of 10 shares. The *fêtes, conversazioni, bazaar,* to be given in these gardens and halls being in many instances of a fashionable and exclusive character, the rights of the original subscribers will become extremely valuable, apart from the profits of the society, which there is every reason to anticipate will be large.

WHEAL MARY TIN MINING COMPANY.

This company was started about 12 months since under very favourable auspices, and the works were carried on with vigour and energy, and with every prospect of success; indeed, far exceeding the probability of any similar undertaking. For some time everything went well, and returns, although greatly delayed, appeared, and the shareholders generally hoped to reap the fruits of their investment, when the even tenor of the way was disturbed by the London office and the management, complaints having been freely made of the delay in operations at the mine, and the consequent waste of capital, the result being the resignation of directors, secretary, manager, &c.

The mine, which appears to be generally admitted as one of the first of its class, has been taken in hand by a board of directors of standing and business capacity, and the demand on the public purse is but small, being only for 3000*l.*, representing 1000 shares of *5l.* each, now issued at *3l.*, or at a discount of *2l.* per share. It is asserted that this sum will be more than ample to realise the practically inexhaustible supply of tinstuff exposed to view on the mine. An offer has been made by a firm of engineers to supply what appears only wanting to make the mine a success—trams and winding gear, for the sum of *220l.*, and to complete the job in five weeks. The remainder of the capital will be required to discharge a few small debts, and leave a good balance in hand in reserve. The prospectus appears in another column, and the reports are highly satisfactory. The statements put forth are vouched for by the responsibility of the directors.

WHEAL GRENVILLE—SPECIAL REPORT.

July 2.—I examined Wheal Grenville Mine again yesterday, being the fourth time since the intersection of the great tin lode in the 140 and 150, and I see no reason whatever to alter my former opinion with respect to the future success, which there is not the least doubt on my mind is only a question of time. The lode has not been opened up east or west of the cross-cut at the 150, the operations being confined for want of ventilation to rising in the back of this level to communicate with the 140. This rise is now up 9 fms., and there are 7 fms. more to hole, which will take from three to four months; and until this is done very little benefit can be derived from the intersection of this lode, as the ground is spare for rising, and the air, both here and at the 140, is very defective, which render the progress slow. By communicating those two levels it will not only thoroughly ventilate this lode, and render every facility for extensive operations, but it will lay open a piece of profitable ground that will take very many years to exhaust, and must increase the returns considerably, subject to my own trials of the stuff carefully taken from time to time, as well as that of the agents. I value the average worth of the lode for the 9 fms. high in the back of the 150, and for the 11 fms. high above the back of the 140, to be *15l.* per cubic fathom; in places it has been worth much more, which is now the case in the rise in the back of the 140, where the lode is worth at present *40l.* per fathom; these, however, are only deposits of tin which the lode is subject to, the best criterion is the average value of the lode for the whole distance opened on. The *15l.* per fathom, however, does not represent the value for the whole width, but only a cubic fathom, and the average width of the lode is nearly, if not fully, 3 fms. At the 140 the lode is opened on east of the cross-cut 20 fms.; in the present end the lode is poor, but for the distance driven the lode is about of the same average value—*15l.* per fathom, and I find the lode is about the same in value as the other mines through which it passes, and on which it is being very extensively wrought on, yielding at the present time in the different mines about 140 tons of tin per month, and daily increasing. The new shaft is being sunk below the 150, and is now down 4 fms. below the level; in sinking this shaft 10 fms. deeper it will intersect this great lode, and which, in my opinion, will be quite deep enough to sink, as above that point the lode standing will be almost inexhaustible, and, judging from the extent on which the lode is now being wrought, nearly 3 miles in length, I have not the least doubt it will be found profitable. Besides this, by sinking the north shaft a few feet deeper and cross cutting about 4 fms., the whole of which will be done in the next three months, the same lode will be intersected there also, which will add considerably to the prospects of the mine, and prove the value of the lode for a long distance in the Wheal Grenville sett. By cross-cutting north from the new shaft at the 130 the lode can, and no doubt will, be shortly intersected, so that it is only a question of time for Wheal Grenville to become one of the greatest tin mines in the county. It will take time to open the lode for stopping to the best advantage, and there must be a call or two to erect sufficient stamping power.—E. ROGERS.

MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

CHAPEL HOUSE.—These works are being carried on most satisfactorily, and the shareholders may look forward with confidence to the continuance of dividends. The output, which is very large, is all disposed of readily at good prices, which leave a substantial margin of profit. The dividend expected this month will, probably, be at the same rate as the last one—*15 per cent.*

WEST ESGAIR LLE.—This mine is again in full work, and dressing will be recommenced in the coming week, after which regular and increasing returns of ore will be made. The reservoir is full of water, and there is no further difficulty anticipated on this head, as the dry season is always considered in those parts to be at an end by the middle of July. The machinery has been thoroughly overhauled in every part during the stoppage necessitated by the want of water, and is now in excellent working order. At the eastern mine the shaft is being sunk with all possible speed, and will be down to the required depth for a new level by the end of next month, when a cross-cut will at once be put through the lode. The prospect of cutting the lode rich at this point has been materially strengthened during the past week by the appearance of gas in the bottom and by an increase of water. It will probably be remembered that these circumstances were the forerunners of the course of lead ore met with in the level above, and which, when cut into, was valued at 4 tons per fathom. The writer does not recall any other lead mine, excepting the Van, where gas issues from the lode. In the Van it invariably accompanies their great courses of lead, and the West Esgair Lle works being on the same lode as the Van, no more promising signs or sure indication of riches could be met with.

TYLLWYD.—This mine is continuing to improve; the south-west lode now produces 2 tons per fathom. At the general meeting, held on 15th inst., several shareholders, considering the favourable position of the company, expressed a desire to double their holding in the undertaking, and the directors accordingly resolved to issue 2000*l.* of the unallotted capital *pro rata* among the shareholders at par.

DAVENPORT MINE.—The prospects in the mine are looking well below the main tunnel; we are 110 ft. below it since we commenced work. We have four men repairing tramway, and four men driving north from shaft No. 2, where we have found a fine body of ore dipping to the south-west, with every indication of making another shot going to the deep. There are 14 men employed.

SOUTH CARN BREA.—At the meeting of shareholders, on July 10 (Mr. R. H. Pike in the chair), the accounts showed a profit on the twelve weeks' working of 781*l.* 11s. 10*d.*, so that after covering the debit balance of 300*l.* from last meeting they had a favourable balance of over 400*l.* to carry forward. The agents' report was very satisfactory. The Chairman said that it was with great pleasure that the agents presented such a satisfactory statement of accounts, and so favourably a report. A profit of 780*l.* in a small mine like their own, on twelve weeks' working, was something to be proud of in such times. South Carn Brea had been rather an exceptional mine for during the last eighteen months they had struggled on without a call, and now they had managed to clear off their little debt. Their financial state was very good, the whole of the liabilities being paid, and a good balance at the bankers. Captain Rich complained that his management had been questioned out of doors instead of at a public meeting, and expressed his willingness to pursue any system of working which the adventurers in public meeting directed him to carry out. As to the additional shaft, he had proposed, for the sake of economy, the utilisation of an old shaft instead of sinking a new one. It appeared to have occurred to several minds that the shaft referred to had been planned for the benefit of Wheal Uny, simply because it would near that boundary by sinking to a depth of between 200 and 300 fms. That intention was most distant from his mind, and it must be evident to all right-thinking people that this would not be of any benefit to Wheal Uny, because Wheal Uny shaft was 20 fms. deeper than South Carn Brea, and they were now driving their ends west towards that mine. Supposing that in the South Carn Brea Mine the levels were actually driven to the boundary, it would lay with the adventurers and lords in South Carn Brea whether they would permit those drivages to be continued. It was hardly likely he thought, and supposing the adventurers and lords of South Carn Brea offered him this privilege, he, on behalf of Wheal Uny, should decline it, because it would not pay to work Wheal Uny through that mine, for they would have to pull the stuff to surface and cart it across the hills a great distance to the dressing-rooms. Mr. Hocking pointed out the absurdity of noticing anonymous newspaper correspondents. Captain Rich described the relative merits of the two modes of working, and Mr. Grylls remarked that he considered the explanation very satisfactory, and believed the shareholders would hold a similar view. Mr. S. Abbott, as representing 900 shares, moved that the account and report of the agents be received and adopted. He represented these shares for the reason that their owners had the most complete faith in the management, and were fully satisfied that Capt. Rich was doing his best for their interests. Mr. Reynolds seconded the motion, which was carried, and the manager and agents received the thanks of the meeting for their attentions to the interests of South Carn Brea. It was stated that 12 months since the price for tin was 73*l.*, yesterday 53*l.*, so that this made a difference in the account of 80*l.* (for tin only) which would have enabled the shareholders to receive a dividend.

The following Report arrived too late for insertion in its proper place:—

EAST BALLESWIDDEN.—Thomas Treahair, July 16: The 30, driving west from engine-shaft, is looking well. The lode in the stopes in the back of the 30 is 18 in. wide, worth *5l.* per fathom. The stopes in the 30, on the flat lode, is 2 ft. 18 in. wide, worth *4l.* per fathom. The lode in the stopes in the back of the Rose lode is 2 ft. wide, saving work for tin.

THE MINING JOURNAL.

FOREIGN MINES.

DON PEDRO.—June 8: The ores have been derived from the original sources—Canary and No. 6 and No. 8 shoots. The samples are improved on last week's return, but no box work has been available. The water being drawn from the mine we are glad to note is less this week, amounting now to 18,000 cubic feet per minute. Sinking has received our best attention, and everything possible has been done to hasten its progress. Stopping throughout the mine has been carried out without alteration.

RICHMOND.—Cablegram from the mine at Eureka, Nevada:—“Hall, London: Week's run, \$40,000. Two furnaces; No. 2 re-lining.”—The directors have declared a dividend of 5*l.* per share on the fully paid-up shares, and a *pro rata* amount on the partly paid-up shares of the last issue. The directors refer to the unprecedentedly heavy falls of snow in April last, which have interfered with the

work. The gravel is good, and the sand or pipeclay contains little or nothing. I shall, therefore, consider when the time arrives whether it will be advisable to send a telegram of the result of a run. We are washing about one day in three, and shall continue doing so until our banks are communicated with the head of sluice. I would remind the board that in Mr. Anderson they have a man who has passed 25 years of his life in this kind of work, and whose experience and energy are of the utmost value. They may, therefore, rest perfectly tranquil as to results. My duty is to carry out Mr. Anderson's views fully and vigorously, and I do so with the conviction that his ideas are of very great, I may say vital, importance. The gravel, as far as exposed, is most promising. Acquiring works admirably, and supplies us already with 1500*l.* of water. Our prospects are such as to lead me to anticipate a brilliant future for Malabar.

GOLD RUN.—J. A. Stone, June 25: The shaft is getting along well; had sunk 21 ft. last Friday, and the gravel is a good deal softer now; they have no trouble in keeping the water out. The mill company adjoining have struck better gravel than they have ever had—they pick up five and six dollar nuggets. The big tunnel is going ahead finely; they have made 80 ft. the last three weeks. The branch tunnel is in over 300 feet; they have had very hard rock the past two weeks, but it is softer now; they will run from 100 to 120 ft. a month. I think they are driving their tunnel very fast. The news of the mill company striking big pay is very cheering, still it does not make me think any more of Gold Run, for there is nothing surer than that the channel runs the whole length of our property, and when it is once fairly opened to the bottom there will be no difficulty to clear up \$30,000 to \$40,000 each run. I hope the directors will accept the Mines Ditch Company's offer, for it is far better than to run an independent tunnel from the creek.

NORTH AMERICA (Gold).—Mr. Morgan, June 20: No washing in the yard has been done since last writing, the water in which, owing to the cold, cloudy weather has not increased in volume as much as was expected, having been all employed on the tailings in the ravine. About 200 ft. of the bed of ravine channel nearest the point where the flume empties into it, has been stripped down, and is now ready to be shovelled up and the gold obtained. The channel bed is found very much filled with large logs, and a mass of brush never before having been cleared. We shall commence to gather the gold from the part already stripped next week; in the meanwhile it is hoped the water may increase, so that 500 or 600 ft. more of the channel can be stripped. Underground the work does not go on very smoothly, it has been found necessary to shut up all the breasts excepting one in the new, or low ground. Too much water has at all these points rendered it impossible to proceed with the work. I am not at all hopeless that the breasts lying on *No. 2* and *3* sub-drifts south can be kept open very long. The bed-rock here is inclining eastwards at a rapid rate. The breasts stopped, in the manner we have had to work them, could not be made to return any profit, as the consumption of timber was very great to keep up the roofs, and the best labour to be had would result in an output of not more than $1\frac{1}{2}$ to 2 loads per day's labour expended. When the water has been drained out from 5 to 6 loads per day for each hand may be safely counted on, which would insure a good profit.

It is unfortunate the turn affairs have taken, and I am in doubt as to what course to pursue. For the present I have put what force I have, which has been reduced to one shift, into the old ground, intending to give that another trial; if that fails to return profits, and I confess I have my doubts about it, there is then only one thing left to do, and that is to abandon for the present all attempts at drifting, and confine operations to opening ahead on the rising rock, and push ahead the present north and south main drifts, to give a better chance of the drainage of the low rock, and, in the meantime, to reduce the force to just a sufficient number of hands to keep these openings running with double shifts, and to keep the mine in order. This would involve an expense of (say) \$150 per month for labour. There is on hand sufficient tunnel and gangway timber for opening at least 500 ft. more ground, also a very large amount of breasting timber. There may be lacking a small quantity of one particular class of timber, the efforts made to drift wet ground having consumed already a great number of pieces of this timber. It is quite clear the operations this season will not result in any profit, even if we manage to keep quite clear of debt. All will depend on our success in the tailings. I do not feel authorised to contract any very large liabilities without your instructions. The further openings to be made would not be entirely unproductive; the main tunnel only would be in bed-rock, while the main drifts would be on the surface of bed-rock, and the gold in the gravel taken out might, when the same was washed, fully, if not more than, pay the cost of running them. When these drifts come to the high rock I am quite certain the gold from gravel out of them would cover all cost. Referring to the prospects ahead I do not hesitate to say that I consider them good. The “ley” of the rock is certainly favourable, and the results of tests thus far made are excellent. It is very disappointing that the returns have been so light thus far, but the condition of the rock over which we have worked since the latter part of 1872 is quite sufficient to explain it. It must be borne in view that the Niagara location has not been touched; in fact, no point reached has been nearer than 500 ft. of the line of that part of the property. It is known to contain a heavy deposit of gravel, and all work yet done by the “Pilot” being on the north, disclosed the fact that the greater part of the channels here are embraced in the North America and Niagara locations. The low bed-rock in North America that baffles our best efforts to work over it this season will, by another season, have become perfectly dry, and can be drifted over with profit. The mine is well equipped, and is in good order generally. While I am aware that when an enterprise like this fails to meet the expectations of those interested, I yet feel that I have done all that has been possible to make it a success. Criticisms of the management are now in order. If the board would relieve me of the responsibility I shall be well satisfied, and as I am certain that the thorough study which I have made of the property, during the time I have been here must be of some little advantage to the company, I will say that my humble services will at all times, and under all circumstances, be at their service.

[For remainder of Foreign Mines, see to-day's Supplement.]

COAL MINES.—In the House of Commons, on Monday, Mr. Knowles asked the Secretary of State for the Home Department whether he would inform the House in what parts of Europe coal and other mines are owned by the State; whether he would explain what are the functions of the Minister of Mines in Belgium and Prussia, and whether the Inspectors employed in those countries act as check viewers as well as Inspectors on behalf of the State; in what manner those Governments leased their mines, whether at a royalty rent or at a percentage on actual profits, and at what average royalty or percentage; and what were the salaries of Inspectors in those States.—Mr. Cross said he had no information at the Home Office on the subject, nor was there any he had ascertained at the Foreign Office. If, however, his hon. friend would move for returns on the subject, he would obtain the information which he required.

ALLEGED INFRINGEMENT OF A TRADE MARK.—At the Manchester County Petty Sessions, on Saturday, before Sir John Iles Mantell and Mr. Peter Spence, A. Van Stan, cement maker, Bridport-street, Dorset-square, London, was summoned for infringing the trade mark of Messrs. Samuel and Thomas Kay, chemists, Stockport.—Mr. Cobbett was for the plaintiffs, and Mr. E. Atkinson for the defendant. It seems that in October, 1863, Mr. Samuel Kay invented a cement which he and his brother called “coaguline,” and to give it a notoriety registered a label with the word “coaguline” upon it. On May 25, Mr. Thomas Kay went to the Botanical Gardens, Old Trafford, where he saw the defendant selling cement in a tent, and in the tent, fixed in a conspicuous position, was a placard bearing the following words “Coaguline Patent, for fixing flowers, mending reliefs and valuable china. Warranted to stand boiling water.” Thomas Kay purchased a bottle, and then told defendant that he had better remove the card, but he refused, saying that he knew the law as well as the complainant. The summons was issued under the 25th and 26th Vict., cap. 88, section 7.—Mr. Atkinson contended that the mere putting up of a placard in the tent bearing the word “coaguline” was not sufficient to amount to an offence under the section—the thing itself should be marked. Nor was there any intent to defraud shown.—The defendant was fined 10*l.*, and 6*d.* for the bottle which he sold to the complainant.

SINGULAR LUMP OF COAL.—The St. Louis *Democrat* says:—“W. Lewis was down at his Big Muddy coal mines on Saturday, and brought back a curious specimen of coal. There are two pieces about the size of the human head, with a flat surface, on which are perfectly straight lines, and between them regular series of numerals as plain as 1, 2, 3.” The diagram represents 15 oblong squares, 12 containing the figures “12,” and three the figures “13.” The *Democrat* says:—“Some of the figures are indistinct, but most of them are as plain as the type we use. They consist of a slight indentation on the surface, and bear no indication of scratching or pressure. Mr. Lewis exhibited the specimen on *Change* yesterday. Mr. Lewis is not a geologist, and offers no theory as to the remarkable phenomenon. He says the chunks, the lines, and figures are exactly as they were when dug from a Big Muddy coal seam, 150 ft. below the surface of the earth, and under 100 ft. of solid rock.”—*Iron Age* (New York).

QUARRYING AND MINING POWDER.—A series of experiments, the results of which must be of importance to miners and mineowners, were recently made with a new blasting powder of great strength which has been introduced to the public by Messrs. Curtis and Harvey. The scene of the experiments was Aldby Quarry, Fazlborough, the property of the Whitewashen Hemiterite Iron Company. No 1 experiment consisted of a hole being bored in the rock to a depth of 2 ft. 9*in.*, in which were inserted two cartridges, each containing eight ounces of the explosive. The result was the detachment of a portion of the outer facing of the rock, and a rending of the more solid parts; but the opinion was that if the “stemming” had been closer the fracture would have been much greater.—No. 2. The same hole was charged with ten ounces of the explosive in a large form, and the discharge was very effective, although it was apparent that much of the force was lost owing to inadequate stemming. Pieces of stone were hurled to a fearful height in the air; and if the power which produced this had been otherwise controlled the result would have been an immense breaking up of the rock.—No. 3. Eighteen ounces of the explosive was inserted in a hole 2 ft. 6*in.* in depth, and a piece of hard rock was fractured to a considerable distance, the estimation being that 15 tons had been split up.—No. 4. Twenty-two ounces of the explosive material was detonated in a bore-hole, a yard in depth, and the result was sufficient to justify the assertion of practical miners that seven or eight pounds of blasting powder would have been required to produce a similar effect. At a distance of about 80 yds., it was seen that the face of the rock moved visibly to a depth of several feet and a breadth of several yards. On the whole, the experiments gave much satisfaction.—*Whitewashen News*.

It is reported that the rare mineral called Osmiridium, an alloy of the two metals osmium and iridium, has been discovered in Gippsland, in the Colony of Victoria. We hear also of valuable deposits of cinnabar having been found in Queensland. As quicksilver is largely employed in the amalgamation of gold ores, it would obviously be a great gain to the Australian miner to be independent of foreign supplies of this expensive metal.

It should be widely known—that the experiment may be repeated—that steam has been employed with remarkable effect in extinguishing fire in the Hidden and Cope Mine, the workings of which are more than 600 ft. below the surface. Mr. Henry Coryell has recently read a paper on this before the American Society of Civil Engineers.—*Engineering*.

Mining Correspondence.

BRITISH MINES.

ABERDAUNANT.—S. Toy, July 15: The No. 2 adit to drive east by four men, at 7s. 10s. per fathom, for the month: This end is producing stones of lead, and is of a kindly appearance. No. 4 stops to stop by six men, at 5s. 10s. per cubic fathom, for the month. The lode in this stop is worth 15s. per cubic fathom for lead. In the east part of the set we are still sinking coatean pits on the back of the quartz lode, and occasionally break some good stones of lead from the same.

ASHFETON.—M. H. Whitford, J. Craze, July 14: The lode in the 50 cross-cut, south of Mawr shaft, is cut into about 6 ft. footwall not yet reached. The part of the lode as far as seen will yield 1 ton of lead and blonde per fathom. We cannot ascertain whether the north and south parts of the lode have intersected each other at this point, but we are of opinion that the leading part of the lode is still south; this will be urged on with all possible, so as to cut through the lode as early as possible. The 40 end, driving west, we have commenced taking down the lode, and have cut into the same 3 ft.; no footwall has yet been reached. The lode is composed of quartz, carbonate of lime, intermixed with lead and blonde ore, presenting a kindly appearance. The 40, driving east of No. 1 winze, on south part, will yield 25 cwt. of lead per fathom. The cross-cut from Brownie's shaft is being driven on, we expect to reach the lode in a few days. The 40 end, east of winze, west of Brownie's, is being pushed on with all dispatch; no lode has been taken down since our last. The various stopes throughout continue to yield their usual quantity of lead. We shipped on Saturday, the 11th inst., 50 tons of lead ore for Sheldon, Bush, and Co. We sampled this day 50 tons of lead, and 50 tons of blonde ores for the 22nd inst.

BAMFYLDE.—Samuel Mitchell, July 13: The copper ore produce at the mines is very satisfactory; we have now very large heaps of it underground, ready to be hauled to the surface.—Stowford Iron Mines: We are getting on well with the driving of the lobby, or rather adit, towards Slader's shaft, and are now opening it at six different places, and I am pretty certain we shall accomplish this work before the wet season sets in. I am pleased, and, in fact, proud, in remarking as to the character of the lode in the level driving east of the new shaft; it is looking better than I have ever seen it; it is now producing fully 70 tons of rich iron ore per fathom, and there is scarcely a particle of waste in it, and it is one of the most masterly lodes ever opened upon in England. The backs of the levels can be stopped away for 1s. per ton. We are also driving between Slader's and the new shaft, and are making good progress—the last productive of ore in either of the points of our operations. The yield of iron ore from the several lodes at Crocombe is about the same as formerly reported. The traction engine is busily engaged carrying iron ore to the railway station for transit to market. Good progress is being made in clearing and securing the adit level west of the office. The ten iron lodes will now yield variously from 10 to 70 tons of rich iron ore per fathom, and the mines are as prosperous as any company can possibly desire.

BEDFORD UNITED.—W. Phillips, July 14: Operations generally are by the side of the lode. The lode in the different points of operation will be proved, and fully reported upon next week for the meeting.

BOG.—W. T. Harris, J. Barkell, July 14: The pitches and bargains throughout the mine are looking much the same as last reported, excepting the 163, driving west on the Whitestone lode, which is further improved, both in value and for progress. It is now worth 20s. per fathom, with every appearance of leading us to a rich bunch of ore. A specimen of the lode we sent you by last night's train. This end going west is entirely new ground. We look upon this discovery as very important feature in the mine.

BURROW AND BUTSON.—John Christophers, Jas. Mayne, St. Agnes, July 15: The lode in the 62 is full 3 ft. wide, 18 in. of which are composed of copper, blonde, and mundic, with a little quartz—a very kindly lode. The lode in the 20 west still carries 1 ft. of blonde mixed with copper, with an improved appearance. We are making great progress in clearing the 40 east; the lode, so far as we can see, carries a 6 in. leader of blonde.—Tonkins: We are driving east on the north or lead lode at the 30, which continues about 1 ft. wide. The lode in the 20 east is full 5 ft. wide, and worth 2½ tons of blonde per fathom. The lode in the 20 east is about 4 ft. wide, composed of blonde, lead, and quartz, and worth 2 tons of blonde and 5 cwt. of lead per fathom. The new dressing machinery is progressing favourably, and we are pushing on towards completion with all force.

CAEGYNNON.—T. Hodge, July 14: The lode in the 70 east end is worth about 10s. per fathom. We are pushing on this end as fast as possible to reach the junction of lodes, driving by six men, at 11s. per fathom. We have six men stopping the back of said level, at 5s. per fathom; it is worth from 7s. to 8s. per fathom. There is no other change worthy of notice.

CEPYN BRWYNO.—J. Paull, July 14: Herewith I beg to send you cost-sheets, and to say that since last report nothing has been done in the 104 east, the lode being in, owing to the long drought; but I am glad to say we had some heavy showers of rain last night, which will enable us to set the wheels, &c., to work again at once, and I hope we shall have more, so as to be able to go on without any further interruption. The tribute pitches are without any alteration worthy of remark—still producing their usual quantities of ore. The dressing, &c., will now be pushed on with the utmost vigour, in order to get another parcel of ore ready for market as soon as possible.

CRENVEL AND WHEAL ABRAHAM UNITED.—Wm. Thomas, S. Arthur, July 15: Sturt's Engine-Shaft: In the 215, driving west, the lode is 3½ ft. wide, yielding 2 tons of copper ore per fathom. We have six men straightening the 203, west of this shaft, to enable us to sink below the 215 as quickly as possible.—St. George's Shaft: In the 203, driving east on south lode and west of shaft, the lode is 1½ ft. wide, yielding 1 ton of copper ore per fathom.—Woolf's Shaft: The lode in this shaft sinking below the 208 is 4 ft. wide, yielding 2½ tons of copper ore per fathom.—Pelley's Engine-Shaft: In the 248, driving west, the lode is 2 ft. wide, producing some good tin-stuff, having a much better appearance. In the winze sinking below the 234, west of shaft, the lode is 5 ft. wide, yielding good stones of tin.—Richards's Shaft: In the 170, driving west, the lode is 1 ft. wide, producing stamping work. In the western rise in the back of this level the lode is 2 ft. wide, worth 10s. per fathom for tin. We have no change to report on in the other hand-gains since last advised. The stamps were put to work last Wednesday, and are working satisfactorily. There are employed this week on tutwork 175 men and boys, on tribute, 69 men and boys; at surface, 60 men and boys. Total, 308.

CWM ELAN.—Wm. Goldsworthy, July 11: Our surface water-supply is again getting very low, therefore our pumps are not going their full force, and the 20 fathoms are again under water, consequently little work has been done in these ends this week. The winze under the 10 will produce 10 cwt. of lead ore per fathom. The stopes in the back of this level are worth 18 cwt. of lead ore per fathom. The very dry weather is also against our dressing of ore.

DEERPARK.—J. Goldsworthy, July 11: The sinking of the engine-shaft below the adit level is being forced on with a full pare of nine men. The stratum is a light blue clay slate, with a mixture of quartz veins and strings of caple, containing copper ore. Favourable progress is being made. The pitwork and machinery is in good order and working satisfactorily. The necessary surface work is being got on with, and will soon be completed.

DENBIGHSHIRE CONSOLIDATED.—J. Pryor, July 16: I am pushing on our various operations with as much force as possible. In the 112 east the ground on the footwall of the lode is nearly all lead; we, therefore, drive on the course of the vein, and then strip the ore down. There is no other change worthy of comment.

DRAKE WALL.—William Skewis, E. Dunstan, July 16: Matthew's shaft is cleared and secured from the surface to the 90, and only now requires a few repairs to the skip-road and footway to place it in good working condition. As soon as this is done tramroads will be laid in the 80 and 90, after which a large quantity of tinstuff will be drawn for the stamp through this shaft. The 90 is cleared and secured 140 fms. In this end the lode is from 12 to 15 ft. wide, producing good stamping work for tin. The lode in the stopes about 10 fms. behind this end is worth 18s. per fathom. In the 50 east the part carried 15 ft. wide, and is worth 15s. per fathom. The full width of the lode is worth 30s. per fathom, or more. In the stopes behind this end it is worth 20s. per fathom. The lode in the 40 east is large, producing low-quality tinstuff; we expect this end is near the main cross-course, but after passing through it it is more than probable an improvement will be met with. At this level we have five pitches being worked, by 20 men, at 10s. in 1/2. Engine-Shaft: The water is being kept 2 fms. below the 90. The shaftmen are now engaged in changing plunger for the purpose of returning the condensing water to the pond by night. As soon as this is done they will be employed to cease and divide the shaft from the 80 to the 90, so as to place it in good condition for driving, after which we shall commence to drive the 90 west to under the run of the recently discovered in the 80 cross-cut south. In the 80, west from Mar's cross-cut, on the south lode, it is worth 12s. per fathom. Stephen's end, on this lode, is worth 10s. per fathom. The north lode, in the 80 west, is worth 8s. per fathom. There is one pitch working in back of this level, by four men, at 9s. in 1/2. Western Whim-Shaft: In the 70 we have two pitches working by six men, at 8s. and 10s. in 1/2. In the 30, driving west, the lode is 12 ft. wide, and worth 12s. per fathom. The lode in the different pitches behind this end is fully 15 ft. wide, and will yield 6 cwt. black tin per fm., or 18s. per fm. The pitch in the back of the 20 is worked by four men, at 9s. 6d. in 1/2, and is producing some rich work for tin. In the adit level there are two pitches being worked by five men at 10s. in 1/2.

DUNSTLEY WHEAL PHOENIX.—W. Skewis, W. Richards, July 10: The whim-shaft was set to sink last Monday, at 20s. per fathom for the month. As no lode has been taken down for the week I cannot report on it, but there are two or three nice looking branches dropping from the south side of the shaft to the north; we like to see them, as in many cases they prove feeders to the lode.—Deep Adit Level: Driving west of cross-cut, on the course of the lode, this lode is improving in size and appearance almost weekly, and looking at the peach and capels in this lode I think it is going soon to produce well.

EAST VAN.—W. Williams, July 15: The 28 is pushed westward with all dispatch, and although we have as yet discovered nothing I must say that we have still a good chance between the present end and the boundary. The cross-cut south for the branch has turned out to be a failure. I have, therefore, removed the men from there to sink a winze upon the lode in the adit level, at a point 20 fms. east of shaft, where we cut good stones of ore, and if we find this to improve by sinking upon it we shall drive the 25 east to come under it.

EAST WHEAL BASSET.—R. Pryor and Son, E. Adams, July 15: Since our last week's report the tutwork and tribute bargains throughout the mine have improved in productiveness, and, on the whole, we consider they are looking better than for some time past. Our machinery is working well.

EAST WHEAL GRENVILLE.—E. Hosking, W. Bennets, July 11: The bargains are looking just the same as last reported.

EAST WHEAL GRENVILLE.—E. Hosking, W. Bennets, July 15: The lode in the 150 fathom level, west of engine-shaft, is 2 ft. wide, and worth 8s. per fathom. There is no change in the 120 cross-cut north. The winze below the 110, west of engine-shaft, is worth about 12s. per fathom. In the 110 fathom level, east of engine-shaft, the ground continues hard and the lode small, but produces a little tin and copper ore. The lode in the 95 east is 2 ft. wide, and worth 8s. per fathom. The stopes below the 95 is worth 12s. per fathom. The stopes below the 85 east is worth 8s. per fathom.

ELGAR.—J. Treveithen, July 16: The engine-shaft sinking under deep adit level is progressing satisfactorily. As soon as 10 fathoms is reached we shall cross-cut to the lode, the distance to which will be 10 fathoms, and prove the character of the lode in the deep adit, 20 fathoms under surface. I am convinced we shall cut into something good.

GAWTON COPPER.—Geo. Rowe, Geo. Rowe, jun., July 11: There is no change in the character of the ground in the engine-shaft, sinking below 100 fms, and the progress is very satisfactory. The lode in the 95 east is 6 ft. wide, producing very

strong mundic and good stones of ore. The lode in the stopes in the back of the 70 is worth 12s. per fathom. All other points are without change.

GLASGOW CARADON CONSOLS.—W. Taylor, W. J. Taylor, July 14: No change to report in the 75 east; the 75 is a little improved, apparently coming in a productive lode. We have holed the rise in the back of this level to the middle level, making good ventilation, and opening out a good piece of our ground for stoping. The middle level west is worth 12s. per fathom; this level east is worth 5s. per fathom. Winze in the bottom of the 65 is worth 8s. per fathom; this we are pushing on, by six men, as quickly as possible. The 65, on the south branch, is improved, worth from 12s. to 15s. per fathom. In the extreme east (65) we are cross-cutting south to cut the south part of the lode, and hope to shall cut it so, as we find it going away in that direction. In the 52 the lode is showing a better appearance, although we cannot report much value to it yet; we are expecting almost daily to get ore to value. The stopes and pitches throughout the mine are looking just the same as last reported, maintaining their full value. We sampled yesterday computed 240 tons of ore, which will be sold on the 23rd inst.

GORSedd AND CELYN LEVEL.—W. Edwards, July 16: In the driving of the adit to cut the Merlin vein the ground looks very promising, and it is evident we cannot be far off this important intersection.—Coetan Glynsh: We expect to get the engine to work in the early part of next week, and hope very soon after that to be exploring below the level.

GREAT RETTALLACK.—John Harris, July 11: The lode in the 40 end east has very much improved for blonde since I last reported, now worth fully 1 ton of good ore per fathom—a very kindly lode.

GREAT SNAEFELL.—H. James, July 13: The lode in the 25 stop is 2 ft. wide, and continues to look well for ore, worth 1 ton of lead and 2 tons of blonde per fm.

The lode in the 74 end is 1 ft. wide, intermixed with lead. In the stopes behind this end the lode is 6 ft. wide, worth 10 cwt. lead and 1 ton blonde per fathom.

The 85 is now being driven on the whole width of the lode, which is not so large as last reported, being from 4 ft. to 5 ft. wide; at present the lode is not so firm and compact, and, consequently, the ore is more intermixed throughout, and does not form itself into a solid rib; the end, however, continues to be very encouraging, and will soon overtake the ore ground discovered in the upper levels, when we confidently look for important improvements.

In the shaft we are making very good progress, as, notwithstanding the unusual drought, the mine has hitherto been kept dry, and the sinking continued without interruption. All the pitwork is in good order.

We have also during the last month commenced an open-east on the south part of the set, where we have surface indications of a promising nature.

The site is known as the north part of the dream, and the open-east has been carried east towards the Great Laxey lode, and is now down about 12 ft. below the surface.

As yet our operations are too limited to pronounce upon its merits and value, but from the presence of a light gossan, mixed with good quartz, we expect it is either the back of a lode or a run of ground very congenial for mineral, and closely connected with a lode. It is parallel to and in a direct line east with the rich bunches of lead discovered at Dumbell's, in the Great Laxey Mine, where, I am informed, a very similar gossan and ground were also found. I hope soon to be able to give more important information respecting it.

GREAT WEST VAN.—James Roach, July 16: Last Saturday the bargains were re-set for the present month. There is no important alteration in the value of the levels or stopes since last reported, except the 34 west, which is gradually improving, and now yielding 1½ ton of lead per fm. and upwards. The driving of this level has drained the winze sunk under the 22; this we shall communicate with the level and stopes east and west therefrom. The carriers are busily engaged bringing ore to the Llanddoo Railway Station to complete the parcel of ore.

GROGWYNION.—J. Kitto, July 14: The only change I have to report to you since my last is an improvement in the main shaft in sinking below the 12; here the lode is looking much better, is yielding very good ore, and the present prospects are exceedingly favourable for the next 24 fm. level. The stopes in the back of the 12 are still looking very well, and producing their usual quantity of ore. In the intermediate level there is no change of importance to notice, although the lode has looked more promising some time during the past month than it ever looked before.

The rise above the deep adit level is yielding good ore, and looking well. The 40 tons of ore sold on July 1 have been sent off, and we shall sample another 40 tons at the usual time. I am having the new drawing-machine got on with as fast as possible, and hope soon to have it at work; this will greatly facilitate our operations, and effect a saving in labour cost.

GWESTYNN CONSOLS.—W. Pearce, July 15: There is no change of importance in the lode in the deep adit since I advised you last week. The lode is composed of clay-stone and prian, intermixed with lead, and letting out a large quantity of water. We are just verging on the junction of the great counter lode.

HINGSTON DOWN CONSOLS.—James Richards, July 16: In the 150 west the lode is from 4 to 5 ft. wide, composed chiefly of capel, with a small proportion of tin and copper ores. In the 110 west the lode is 3 ft. wide, composed of mundic, capel, quartz, peach, and a little black oxide of copper. The lode in the three stopes in the back of this level—the 140 west—is of the same value as for some time past—30s., 25s., and 20s. per fathom. Cocking's winze is in regular course of sinking below the 140 west, and considering the hardness of the ground fair progress is being made. In the 120 west the lode is 2½ ft. wide, and promising, being composed of capel, mundic, quartz, a little black oxide of copper, and occasionally a little malleable copper. In Fitz's winze, sinking below the 120 west, the lode continues worth 25s. per fathom. In the 110 west the lode is still large, being fully 5 ft. wide, consisting of capel, quartz, peach, mundic, and saving work for copper ore; it is promising a further improvement. In the stopes in the back of the 110 west the lode is worth 15s. per fathom.

ILLOGAN.—R. Pryor and Son, July 15: There has been no change throughout this mine calling for remark since our report for the meeting of shareholders.

KINGSTON VALLEY (Lead).—G. F. Richards, July 9: We have driven west about 4½ fms. from the bottom or 18 fm. level, cross-cut on the northern portion of the south lode; at the commencement thereof this part was composed of flockan, quartz, and sulphur-mundic, and consequently the drivage produced fine capel, quartz, sulphur-mundic, and spots of lead; just at the extreme part of the level a distinct branch of quartz came in on the north side containing rich silver lead ore and blonde. From this point we turned the drivage north for proof of the main lode standing in that direction, and after passing through a few feet of favourable strata we intersected some portion of the lode, consisting of branches highly mineralised, with one principal branch from 6 to 7 in. wide, containing rich silver lead ore, blonde, copper pyrites, iron pyrites, and beautiful quartz. We are still cross-cutting, and have about 2 fms. more to extend north to intersect the principal and most productive part of the lode. The lode in the winze in the bottom of the adit level is looking very well, and will produce good work of silver-lead and blonde ores, with an intermix of gossan, fine quartz, and other minerals. We have also opened upon the south lode in the bottom of the adit level, and I am pleased to say that here also the lode (which is very large) possesses a highly favourable appearance, with rich-looking gossan and quartz, and will produce good work of rich silver lead and blonde ores.

JULY 15: Since writing the above I have much pleasure in informing you that a further improvement has taken place in the cross-cut north of western drivage, another branch having been intersected with rich silver-lead ore, which will yield 1 ton per fathom. This altogether forms a very important improvement in the mine. We now purpose taking down the whole of the north portion or main ore-bearing part of the lode standing between the two cross-cuts.

LADY CONSTANCE.—Wm. Wasley, July 16: There is no change to notice in the ground in the cross-cut at Katie's shaft since reported on last week, but I think we cannot possibly have much further to drive to cut the lode.

LADY WELL.—A. Waters, July 16: At the engine-shaft we have fixed the pit-work, and got everything ready for sinking the shaft below the 16 fm. level. In the 16 north we are driving by the side of a nice sparly, grey lode, of similar character to the Roman vein. In the 16 south the air is bad, and we have put the men to rise to the adit level for ventilation, in a lode worth 3 tons of lead ore per fathom. Nothing new in the flat-rod shaft or about there since my last.

MELINDUR VALLEY.—J. Kitto, July 16: I am glad to be able to inform you that the lode in the 14, west of engine-shaft, has greatly improved in character since we resumed the driving, and at present there is every appearance of it soon becoming productive. The stopes in the back of the adit level are still looking very well, and are yielding a good quantity of ore, and we have many tons of lead at surface and underground already broken, and ready for dressing, and we have commenced to prepare the stuff for crushing. We have erected new jiggling-machines, and have put the dressing machinery in thorough repair, and by the end of this week shall be ready to commence washing the stuff as it comes from the mine. There is no change in the north cross-cut, but we are pushing on the driving as fast as possible, with a view of intersecting the north lode.

NEW GREAT CONSOLS.—Richard Pryor, Thomas Jenkins, Henry Vial, July 14: Saturday last being our pay and setting day we set our usual number of tutwork and tribute bargains, the productiveness of which continues just as for some time past. The whole of our machinery is working well, and our surface operations are being prosecuted with the utmost vigour. Our pay and setting passed off well.

worth 30*l.* per fathom. The 15, driving west of cross-cut, is producing tinstuff to dress, and the tribute pitches on this lode are yielding their average quantity of tin. Our prospects in this part of the mine are very encouraging. No other change to notice.

SOUTH CONDURROW.—J. Vivian and Son, Wm. Williams, July 15: We are preparing, by cutting winze plat, &c., to commence sinking a winze under the 82, west of King's shaft, to communicate with the 93 cross-cut as soon as it reaches the 82, west of King's shaft. The lode is 5 ft. wide, and worth about 15*l.* per fathom. In the 82 west the lode is 5 ft. wide, and worth about 15*l.* per fathom. In the 71, west of King's shaft, the lode is 4 ft. wide, and worth about 14*l.* per fathom. In No. 3 winze sinking under the last named level, and now down 11 fms., the lode is 6 ft. wide, and worth about 35*l.* per fathom. In the rise over the 71, east of King's shaft, the part of the lode being carried is 5 ft. wide, and worth about 15*l.* per fathom. In the 61, east of King's shaft, the lode is 5 ft. wide, and worth about 15*l.* per fathom. In the winze sinking under the last named level the part of the lode being carried is 5 ft. wide, and worth about 15*l.* per fathom. We have commenced sinking a winze under the 20, east of new shaft, where the lode is 2 ft. wide, and worth about 12*l.* per fathom. In the 30, east of Fraser's shaft, the lode is 1*1/2* ft. wide, and thin. In the new shaft, now down to within 6 ft. of the 30, is 1*1/2* ft. wide, and thin. In the new shaft, now down to within 6 ft. of the 30, is 1*1/2* ft. wide, and thin. In the new shaft, now down to within 6 ft. of the 30, is 1*1/2* ft. wide, and thin. In the new shaft, now down to within 6 ft. of the 30, is 1*1/2* ft. wide, and thin. Other places without the lode is 2*1/2* ft. wide, and worth about 12*l.* per fathom. Other places without alteration requiring notice.

SOUTH GREAT WORK.—S. J. Reed, July 16: We are looking still better in the 10 west: I think we have intersected one of the Perran Down lodes, it is rich for tin at the junction. I will inform you further of it when we have cut through it.

SOUTH ROMAN GRAVELS.—J. W. Powning, July 16: Shieldfield: I have two men sinking a small trial shaft on the course of the lode discovered in cutting the foundation for engine-house, &c.; the part of the lode carried in sinking is composed of pyroxite of iron, and splendid lumps of lead ore, and presents every appearance of further improving as depth is attained. The masons are progressing well with the building, and all other work is being pushed on as fast as possible.

SOUTH ROSKEAR.—J. Brenton, J. Hosking, July 11: There is no alteration to notice in the mine since our last report. Gregory's engine-shaft men have been employed during the week in constructing flat-rods, and preparing to drop a lift in Dunkin's shaft, in order to drain the eastern workings to the 80 fm. level. We are pushing forward this work as fast as possible.

SOUTH TOLCARNE.—Joseph Vivian and Son, James Pauil, July 16: We beg to report as follows:—We have not yet removed the sump from the 20, west of engine-shaft cross-cut on Fraser's lode, because the indications for copper are very favourable, and we are denuding the most metalliferous part of the lode, which will be stripped down next week. We now find that this lode has increased in width since leaving the deep adit level from 3 feet to 15 feet. In the deep adit level, west of cross course on Hickey's lode, the south branch is improving, and producing rich grey and yellow copper ore. The north branch is increasing in size, and producing yellow copper ore, the distance between the two parts of the lode being about 3 ft., which is made up of granite, traversed by seams of lode, so that we are looking forward to a junction of the various parts of the lode, and an improvement in the production of copper.

ST. AGNES CONSOLS.—Wm. Vivian, July 16: The engine-shaft is now down to the 72. We shall continue the sinking of the shaft another week, and shall then commence to cut plat, and drive south to intersect Wheal Kitty lode. There is no change to notice in the other parts of the mine.

ST. JUST AMALGAMATED.—R. Pryor, Wm. Bawden, T. Richards, July 14: We have no change of importance to report on throughout the underground department of this mine since our last report. The tutwork and tribute bargains are producing their usual quantities of tin, and we are making fair progress towards the next sampling.

ST. LAWRENCE, VICTORIA, AND VALENTINE.—W. Wasley, July 16: St. Lawrence new shaft has been set to six men to sink 12 yards below the 52 yard level at 50*l.*, the men to pay all costs. The 52 yard level end east has been set to four men, to drive for this month. The lode is small at present, but I expect it will soon open out wider and produce more ore. The tributaries in the roof of the 52 yard level are making very good wages, and the lode looking very promising.

TAMAR CONSOLS.—George Rowe, June 15: The ground in the cross-cut towards No. 2 manganese lode continues of the same mineralised description, and our progress is satisfactory.

TANKERVILLE.—A. Waters, July 16: The 152, west of Watson's engine-shaft, is worth 5 tons lead ore per fathom, and improving as we approach the cavity, which is now near at hand. The 152, east of shaft, is in a strong wide ore lode. The 140 fm. level cross-cut (9 fms. west of shaft) driven south to side lode, proves the continuance of the latter as a strong ore fine-looking lode in depth, and which will give permanency to the mine; splendid ore-stuff is now in sight, and the cross-cut is not yet near being through the lode. The side lode in all the levels from the 130 to the 74 is yielding from 1*1/2* to 3 tons lead ore per fathom. There are 14 bargains working, yielding in the aggregate 34 tons of lead ore per fathom, and most of them are ends, and therefore opening reserves of ore ground. The mine looks better for a long time past. It is to be hoped that a change in the weather will take place soon, that we may have water for dressing operations.

TREGARDOCK.—J. and T. Spargo, July 16: The mine throughout continues to hold good, and the different points in operation still show signs of good ore and a further improvement. Everything is being pushed on as fast as possible with the number of hands employed.

TRELEIGH WOOD.—E. Hosking, July 15: The ground in the 44, east of the cross-course, is easier for driving, and producing good stones of copper ore and saving work for tin; a more promising lode for tin and copper cannot be seen. The lode in the 34 east end is also improved, and is now worth 15*l.* per fathom. There is no other change.

TREVARACK.—J. Pope, July 15: In the engine-shaft sinking below the 60 the lode is 3 ft. wide, composed of peach and prian, with good stones of tin, and letting out more water than usual, from which I expect further improvement. In the 60 fm. level east the lode is 2 ft. wide, principally peach, with a little tin. In the 48 east the lode is 3 ft. wide, producing limestone, but not to value.

TYLLWYD.—John Paul, July 14: I am now come up from surveying underground, and am happy to say that a further improvement has taken place in the south-west lode. It has improved both in size and quality, and is now worth fully 2 tons of lead ore per fathom, and still likely to improve. The 29, west of cross-cut in engine-shaft, is also looking much stronger, producing nice specimens of lead ore, and the water has sunk a great deal in the shaft at mouth of level since you were here. I am glad to say all points are looking well throughout the mine, and good progress is being made.

YAN CONSOLS.—J. Roach, July 16: Since my last advice we have squared the breast of the 25 cross-cut from the main shaft, fixed the 7 inch drawing lift to the bottom, and blasted a few holes in the face of the lode, which produced lime spar, blende, and spots of lead ore, but we have nearly the whole width of the ore-bearing part of the lode yet to drive through. We have now sunk No. 2 winze under the 15 fm. level 12 fathoms, and at this point we have commenced driving east; the lode carried is 3 ft. wide, consisting of a mixture of sulphate and carbonate of baryta, and strong cubes of lead ore; here we expect to meet with a valuable lode of lead directly. Scarcely any water here. In No. 3 winze there is no alteration in the width of the lode or value since estimated last week at 8 tons of lead per fathom; I shall resume sinking on this course of ore in a short time hence, which I believe is connected with very large quantities of lead. The stopes east and west of the winze are yielding about 3 tons of lead each per fathom. The 15 east is producing solid pieces of ore. The eastern stope, above this level, is yielding 15 to 20 cwt. of lead per fathom; the western ditto 2 tons of carbonate of barytes per fathom. The cross-cut in the adit level east is still passing through veins of lime spar and lead.

WEST CHIVERTON.—J. Juleff, R. Nancarrow, W. Nicholls, July 16: The 140 end, west of the new engine-shaft, we are glad to say continues to improve, and we hope it will open out equal to our expectations. Other places looking much the same as at the last meeting.

WEST ESGAR LLE.—R. Harvey, July 16: We continue to make good progress in sinking Hamilton shaft below the 24, notwithstanding a great increase of water from the lode during the past week, which I consider an excellent indication, especially as we have had a strong smell of gas with it. I hope to commence cross-cutting into the lode the latter part of next month. There is no change of importance in the western mine. The water is now down to the back of the 10, and we expect to have it in fork here by the end of the week.

WEST MARIA AND FORTESCUE.—W. Skewis, N. Coward, July 16: West Maria Lode: All points throughout the mine on this lode are looking the same as stated in last week's report. Willesford's shaft is being sunk as fast as possible by the side of the lode, below the 93 fm. level. The 93 west is being driven by the side of the lode, which, when last taken down, was worth 30*l.* per fathom. The stopes in the bottom and back of this level are worth respectively 50*l.* and 25*l.* per fm. Arms Department: The kilns are producing the usual quantity of arsenic.

WEST MILWR.—William Francis, July 15: The No. 2 shaft is now properly secured to the adit level. The cross-cut, south from West Meadow shaft, is still in very hard ground, but the progress is satisfactory under the circumstances, and the rock shows some signs of a favourable change.

WEST TANKERVILLE.—Arthur Waters, July 16: South boundary shaft is down 10 ft. below the 50, and the sinking progressing fairly. The 50, south of shaft, is going forward in a strong and fairly productive lode. The winze below the 48 is also going down in a strong lode, worth 2 to 3 tons lead ore per fathom. The 48 south is worth 1 ton lead and 2 tons lead ore per fathom. The 46 cross-cut west is not yet into Lawrence's lode.

WEST WHEAL GORLAND.—J. Mayne, July 16: Messers': The men are making good progress in sinking the engine-shaft, and the lode in which shows every indication of further improvement as it is being wrought on. The lode in the stopes in the bottom of the 40 fm. level west is looking well, and, as soon as there is a communication effected from this to the north lode by the hoisting of a piece of ground which will give more ventilation, we shall be in a position to have an increased quantity of tinstuff from this level. The 30 fm. level driving east, on the north lode, is letting out a great deal of water, and producing some good work for tin. No other change to remark in any other part of the mine.

WEST WHEAL TOLGUS.—July 15: We are pleased to say that the 125 end west is rather better than it has been for some time, the lode being still 8 ft. wide, yielding all 13 tons of ore per fathom. The ground is harder than it has been (or to put it as the men call it, "tuff"), but a fine lode. We are glad to see the lode a little firmer, as it yields the better. We have estimated the value on the safe side, and we may safely say 14 or 15 tons of good ore per fathom. The lode in the 115 end is just the same as last reported—18*l.* per fathom, kindly, and letting out a little more water. The lode in the 95 end is without alteration—2 ft. wide, a kindly lode, but not much ore. The lode in the 85 end west is without alteration—5 ft. wide, yielding 11 tons of ore per fathom—a fine lode. The lode in the back of the 85 is rather better now, yielding 9 tons of ore per fathom. The lode in the 75 end west is looking well, improving a little, and now yielding 3 tons of ore per fathom, and where the north part intersects it, no doubt will improve it. There is no alteration to notice in the bargains at Richard's shaft. We have this morning commenced repairing Taylor's shaft between the 50 and 60; the timber is weak for 7 or 8 fms. at this point. The shaftmen, with the pit and timber men, will go on night and day until it is finished, which will take some days to do. We have drawn up ore enough for the sampling, and cleared the levels to enable the men to work on without hindrance. We can hardly tell how much ore we shall sample, but we think it will be pretty well up. We reckon on nearly 350 tons of adventurers' and 100 tons of tributaries' ore.

WHEAL ARGUS.—J. Trahair, July 16: Our survey and pay day was on the 11th; since then there is nothing more in the mine to report. The stamps and machinery are in good working order, but the dry weather has made much against the stamping of the tinstuff.

WHEAL BASSET AND GRYLLS.—William Oats, Paul Prisk, July 15: The shaftmen have completed their contract to take down horse of ground, north lode, to the east end of Wheal Cook engine-shaft, and are now driving east on the north lode, at 10*l.* per fathom, which is 3 ft. wide, of a very kindly appearance,

and producing good stamping work; we shall now be in a position to save the lode to itself, and ascertain its value. In the 35 east the lode has considerably improved; it is now 3 ft. wide, of a more promising appearance than for some time past, and producing tin enough to about pay for driving. The 15 continues to look very promising, and no doubt we shall have an improvement here shortly, the lode at present producing good stones of tin; there is a part of the lode standing to the north, which will be taken down in a few days. The new shaft on south lode is completed to the deep adit level, plat cut, and solar put in; we shall now take up the adit water, and commence clearing below; this will be pushed on with all possible speed, so as to get down as far as possible against the line of flat-rods. The rods, too, pitwork, &c., are all on the mine, with the exception of a 6-in. working barrel, which is promised to be sent here on Friday next, and every effort is being made to get them fixed as quickly as possible, believing that when we reach the bottom of the old workings we shall find a good lode, which from surface to the deep adit is all taken away to what extent below we cannot say. The old workings appear to be from 4 to 5 ft. wide, and the wood pump used by the old workers for drawing the water from below adit is standing in its place as used by them. The indications altogether are very encouraging. In the tribute department there is no change to notice since our last report.

WHEAL GREENVILLE.—E. Hosking, W. Bennetts, July 11: The north shaft is now down to the 130, and the men will commence the cross-cut towards South Condurrow lode on Monday. No change in any other part.

WHEAL KITTY (St. Agnes).—S. Davey, John Williams, July 11: New Shaft, Pryor's Lode: We have nothing new to report in the new shaft sinking below the 142. The lode in the 142 driving east of shaft is producing a little tin. In the 142 driving south we are still in hard capel, as mentioned in our last report, letting out water freely, which makes it slow of progress. In the 142 driving north on the counter the lode is 2 ft. wide, and worth for tin 8*l.* per fathom. The lode in the 130 driving west of shaft is 2*1/2* ft. wide, and worth for tin 13*l.* per fathom. The lode in the 118 driving west of shaft is worth for tin 10*l.* per fathom. In the 106 driving west of shaft the lode is worth for tin 9*l.* per fathom. The lode in the 100 driving west of shaft is 3 ft. wide, and worth for tin 8*l.* per fathom. The lode in the 90 driving west of shaft is producing a little tin. The lode in the north adit level driving west of eastern boundary is producing minerals of both tin and copper, but not sufficient to value.

WHEAL MARY HUTCHINGS.—H. Miners, July 15: I am pleased to inform the shareholders that since my report on June 10 the mine throughout has shown signs of improvement, especially on the new south lode. The ground is now very congenial for the production of mineral, being a light-blue kilns, and the lode from 2 to 2*1/2* ft. wide, producing good stamping work. The lode in the 32, both east and west of shaft, is also improved, and the stopes and tribute pitches are still producing their usual quantity of tin.

WHEAL RUBY.—J. Richards, July 15: I have no change in the lode to report in driving the adit level west since my last communication; the lode continues large, and I am daily expecting an increase of tin, and the indications are sufficiently encouraging to warrant it; the ground is more favourable for driving, consequently we are making greater progress towards the junction of granite and kilns before us, where we have every reason to expect a profitable lode in addition to the tin ground already driven through. With a little further perseverance I have confidence we shall reach the great object.

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE CORNWALL TICKETINGS FOR THE QUARTER ENDING JUNE, 1874.

Mines.	Tons.	Amount.
South Caradon	1219	£ 9,105 3 0
West Tolveth	1092	6,635 15 6
Crenver and Abraham	834	4,502 7 0
Marke Valley	1115	3,907 4 6
Glasgow Caradon	740	3,698 11 6
Devon Great Consols	826	3,320 10 6
Hington Down	750	3,083 2 0
West Seton	511	2,982 15 0
East Caradon	465	2,203 3 0
Brookwood	310	1,538 19 0
South Crofty	459	1,440 18 0
Carn Brea	271	1,282 19 6
East Pool	448	1,172 10 0
South Carn Brea	281	1,110 6 0
Wheat Russell	295	1,097 14 0
Phoenix	127	1,083 7 0
Bedford United	243	1,050 0 0
Prince of Wales	220	986 15 0
Wheal Bassett	106	862 6 6
St. Aubyn United	151	835 4 6
Gunnislake (Cliters)	156	751 2 6
Botallack	61	678 14 6
Levant	36	490 10 0
West Maria and Fortescue	80	426 10 0
Duchy Great Consols	110	407 9 0
West Bassett	76	386 15 0
East Seton	87	354 7 6
Gawton	122	347 14 0
South Dolcoath	92	347 13 0
East Grenville	62	288 13 6
Wheat Seton	60	255 0 0
Carn Camborne	120	234 12 6
Wheat Friendship	32	223 9 0
West Bassett	27	173 9 6
West Caradon	36	138 12 0
New Rosewarne	15	133 12 6
Calstock Consols	28	119 0 0
West Roskear	30	112 10 0
Wheal Trebavah	25	99 6 0
Florence and Tonkin	28	77 14 0
Belstone	13	77 7 0
South Roskear	11	60 10 0
New Dolcoath	10	58 0 0
Unity Wood	12	57 16 0
Williams's Ore	12</	

weaker, at $7\frac{1}{2}$ to 8. Tincroft shares may be had at 31 to 33. West Basset, 10 to $10\frac{1}{2}$, firm. West Seton quiet, at 25 to 27. Wheal Jane, $2\frac{1}{2}$ to 3; Wheal Unity, 2 to $2\frac{1}{2}$.—West Briton.

ANGLO-AUSTRALIAN GOLD MINE.—The advices received by the mail this week are very satisfactory, the tributaries having crushed 35 tons of stone, which yielded 50 ozs. 10 dwt. of refined gold. The drivings and stopes have also yielded 65 tons of stone, giving 23 ozs. 18 dwt. of gold. We understand that half the new capital has already been subscribed for, and it will be to the interest of the shareholders to take up the remainder without delay, to enable the works to be carried on on a larger scale, and good profits no doubt made.

CHONTALES.—The accounts from this mine, published in another column, show that the returns have just covered the cost. Heavy floods in the middle part of May caused landslips, and so blocked up the entrance to the Estrella Mine. It is, however, an indication that the wet season is near, and it is expected that the next month's working will show a better result, as the manager reports the damage to be nearly repaired previous to the departure of the mail. At San Benito East they have intersected the lode in the cross-cut, and found it 6 feet wide—payable quartz.

GLANSEVERN.—The manager writes that fine looking ore has been sent in the level 12 fathoms below adit, and has sent to the offices in London some splendid stones of ore taken from the lode at that point. This is the commencement of the fine bunch met with in the adit, and what has been expected and worked for, but it was scarcely hoped that such rich ground would be met with so early a date. The shareholders are to be congratulated on the very encouraging indications of the mine becoming very shortly a great success for the company. A great improvement has taken place in the lode in the adit level, and this is also a most important feature for the ground above rising so quickly; a discovery may be looked for any day.

OLD TREBURGETT.—This mine has again sold its usual monthly quantity of 60 tons of silver-lead ore, realising 1721L 11s. The directors have declared an interim dividend at the rate of 10 per cent. per annum on the preference shares on August 4 next.

The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JULY 17, 1874.

COPPER.		IRON.		STEEL.		TIN.		ZINC.		QUICKSILVER (P. hot.)		TIN-PLATES.	
£	s.	£	s.	£	s.	£	s.	£	s.	£	s.	£	s.
Best selected—p. ton	86	0	0	88	0	0	0	0	0	0	0	0	0
Tough cake and tile.	84	0	0	86	0	0	0	0	0	0	0	0	0
Sheathing & sheets.	92	0	0	93	0	0	0	0	0	0	0	0	0
Bolts.	96	0	0	98	0	0	0	0	0	0	0	0	0
Bottoms.	93	0	0	95	0	0	0	0	0	0	0	0	0
Old.	80	0	0	85	0	0	0	0	0	0	0	0	0
Australian.	86	0	0	88	0	0	0	0	0	0	0	0	0
Wire per lb.	0	1	0	1	0	0	0	0	0	0	0	0	0
Tubes.	0	1	0	0	0	1	0	0	0	0	0	0	0
BRASS.													
Sheets.	10d.	—	11d.	—	11d.	—	11d.	—	11d.	—	11d.	—	11d.
Wire.	10 $\frac{1}{2}$ d.	—	11d.	—	11d.	—	11d.	—	11d.	—	11d.	—	11d.
Tubes.	11d.	—	12d.	—	12d.	—	12d.	—	12d.	—	12d.	—	12d.
Yellow metal sheathing.	73d.	—	84d.	—	84d.	—	84d.	—	84d.	—	84d.	—	84d.
Sheets.	73d.	—	73d.	—	73d.	—	73d.	—	73d.	—	73d.	—	73d.
SPelter.													
Foreign on the spot.	22	10	0	—	—	—	—	—	—	—	—	—	—
Do. to arrive.	22	7	6	—	—	—	—	—	—	—	—	—	—
TIN.													
In sheets.	28	10	0	29	15	0	0	0	0	0	0	0	0
QUICKSILVER (P. hot.)	19	15	0	0	0	0	0	0	0	0	0	0	0
TIN-PLATES.													
English blocks.	£	07	0	0	98	0	0	0	0	0	0	0	0
Do. bars (in brls.)	98	0	0	99	0	0	0	0	0	0	0	0	0
Do. refined.	100	0	0	100	0	0	0	0	0	0	0	0	0
Banca.	98	0	0	100	0	0	0	0	0	0	0	0	0
Straits.	96	0	0	97	0	0	0	0	0	0	0	0	0
Australian.	95	0	0	—	—	—	—	—	—	—	—	—	—
TIN-PLATES.	per box.												
1C Charcoal, 1st qua.	£1	10	0	—	—	—	—	—	—	—	—	—	—
1C Do. 1st quality.	2	0	0	—	—	—	—	—	—	—	—	—	—
1C Do. 2d quality.	1	15	0	—	—	—	—	—	—	—	—	—	—
1C Do. 2d quality.	2	1	0	—	—	—	—	—	—	—	—	—	—
1C Coke.	1	9	0	1	10	0	0	0	0	0	0	0	0
1C Ditto.	1	15	0	1	16	0	0	0	0	0	0	0	0
Canada plates, p. ton.	19	0	0	—	—	—	—	—	—	—	—	—	—
Ditto, at works.	18	10	0	—	—	—	—	—	—	—	—	—	—
At the works, ls. to 1s. 6d. per ton less.													
Terme 2s. per box below tin-plates of similar brand.													

REMARKS.—The week now closing has, like many of its predecessors, been only remarkable for being, if possible, less eventful than those which have preceded it. Such a degree of dulness has been attained that it is hardly possible to conceive a yet lower depth; and the assurance is very generally acknowledged that as matters cannot be worse, each day as it passes tides us over the dull period, and that we are approaching a time when of necessity there must be a return to normal activity. There is little in the general aspect of affairs to cause any doubt to arise as to the favourable turn so universally desired. It is not as if rampant speculation had brought ruin upon rash operations and glutted the markets; nor is it that production has been forced beyond the limits of a healthy consumption, but the want of confidence in the stability of the markets is such that buyers will not come forward to any extent. This, no doubt, has been occasioned partly by the American crisis, and the general distrust of American securities; the panic in Vienna and other continental cities, and the famine in India; but although these causes have exercised considerable adverse influence, yet the main reason is decidedly owing to the inattention of unprecedented high prices after the proper time. So soon as it was known that trade was suffering from the excessive dearth of prices, especially of iron and coal, some relaxation ought at once to have been made, and buyers would then have felt satisfied that sellers were ready and willing to meet the altered state of circumstances; instead of which, sellers held out much too long, persistently objecting to submit to the necessary reductions, and as consumers could not pay their exorbitant demands, they very naturally everywhere were resolved to limit their requirements in every possible way until reasonable prices were taken. The present state of the market, which may be described as almost actual stagnation, is chiefly the result of this indiscretion. Manufacturers and men alike are to blame for their overbearing spirit of avariciousness, and although their interests are identical, yet they seem to go diametrically opposite to one another, and unless there is a better understanding between them for the future, and that effected quickly, the masters will be involved in great losses, and a period of immense suffering will have to be endured by the miners.

COPPER.—The market has taken a downward turn, and prices are again lower. There is comparatively little doing, and the stock of Chilli bars in Liverpool and Swansea having increased 1700 tons during the last fortnight, it has naturally produced a depressing effect, and the future of the market is exceedingly doubtful, and it is very questionable whether present rates can be maintained much longer, as the consumption in Birmingham is very limited just now, and shipments of copper and yellow metal to India are much smaller. The market closes with a downward tendency—Chilli bars at 78L, and Wallaroo 88L.

IRON.—Although nothing definite has transpired which alters the position of the iron trade materially, yet it is generally admitted that the tone of the last quarterly meeting, held in the North of England, was a shade more encouraging. There was no question that the enquiry for finished iron was greater than it has been of late, and that so soon as this fact was established the demand for pig-iron sympathised in the improvement. As regards prices, there is no disposition to give any advance upon current rates, but as the tone of the market improved quotations were found very generally to assimilate to the highest current quotation of the day, below which there were few, if any, sellers. No. 1 iron is now obtainable at 88s. to 78s.; No. 3, 62s. 6d.; No. 4, 58s. During the last few days some orders for railway iron have been placed, and negotiations are in progress for considerable quantities; but in view of the very sharp competition that exists, not only amongst makers in the North of England but elsewhere, it is very doubtful how far these enquiries may culminate in orders; still it is to be hoped that they should not be placed in the North of England they may be executed somewhere in the United Kingdom, and not, as has been the case of late, in Belgium. The iron trade in the North of England has during the late dull period received its main stay from the engineering and shipbuilding yards, in both which departments increased vitality is perceptible. Fresh orders are being booked, among which may be noted one for a 14-gun frigate, and another for a bridge nearly two miles in length. Rails are quoted 18L 7s. to 8L 10s.; plate iron, 9L 15s. to 10L.; merchant bars, 9L 15s.; angle iron, 9L 15s.; puddled bars, 8L 17s. 6d.

Mention has been made of the returns of the professional accountant who is to fix the rate of wages in the North and the Staffordshire districts. These returns have not yet been made up, but their publication is expected shortly. It is not supposed that the reduction in the rate for the coming quarter will be very considerable. Supplies of raw material are coming in from the ironstone mines of the Cleveland district, and it is found that these are at present sufficient for the demand. The position of the Birmingham market has also improved somewhat. For a long time past, owing to the unsettled condition of the iron and coal trades generally, very little business was concluded in the class of goods dealt in at Birmingham, but inasmuch as few orders on this account have been given out, but rather allowed to accumulate than be placed at disadvantage, it is believed that a considerable breadth of contracts is likely to be passed so soon as matters are definitely settled, and the price of finished iron is believed to be determined. At the moment there is very little being done, attention being given to stock-taking for the half-year. Shippers to the colonies are fairly busy, and the amount doing with Australia is satisfactory. Published returns show that during the six months just expired the exports of hardware are in excess to the extent of 5 per cent., as compared with the first six months of the year 1873. The demand for India shows a remarkable increase over that of last year, inasmuch as the exports of last month are more than 100 per cent. above those of the corresponding month of the previous year. Business with America has been quiet, but enquiries from the United States are coming forward. There is not much doing with Canada, but the business with Spain is on the increase; with this exception, most other continental centres show a falling off, but taking the business of the first half-year all round there is an increase to the extent of 3 $\frac{1}{2}$ per cent. over the first half of last year. A general improvement during the coming half-year is looked for. Scotch pigs are quiet, and shipments continue to decrease.

LEAD.—There is no alteration to speak of. The demand is not so

particularly active, but prices are tolerably well upheld, and there is a total absence of speculation.

SPelter.—The market for this metal is very quiet, especially for export. This is also the case in regard to hard, in which prices are somewhat lower.

TIN.—A rather serious fall has taken place in foreign, and this, of course, has affected the position of English; in fact, it is a drop in value all round, and up to the present time it does not appear to have produced the desired effect of stimulating the consumption. There is no disposition apparently on the part of anybody to buy, and until the holidays are over there will probably be very little doing.

Messrs. J. Pitcairn-Campbell and Co. (Liverpool, July 15)—COPPER.—The market has again been unsettled by the action of American holders of copper, who have been offering, and it is understood succeeded in placing, from 2000 to 2500 tons Lake Superior for shipment to Europe: 700 tons, we believe, are to come to this country, and the remainder to the Continent. The price is stated to be 87s. per ton delivered, usual terms. Although it is understood that this movement is connected with a speculation which has been going on in America rather than from a necessity to relieve themselves from an over supply, still the occurrence naturally causes great uncertainty and sensitiveness, and we have to quote a weak market at a decline of 30s. per ton on Chill bars. Quotations are 77s. to 80s. for the latter; 15s. 3d. to 15s. 9d. for ores and regulus; 16s. 6d. nominally for Corocoro Barilla. Business transacted during the fortnight comprises about 600 tons bars at 77s. to 81s. per ton and, 100 tons regulus at 15s. 9d. per unit. Arrivals here during the fortnight of West Coast S.A. produce—Singapore, from Valparaiso, with 13 tons of bars; Sorata, from Valparaiso, with 189 tons of regulus, 800 tons of bars, and 100 tons of ingots; Serena, from Valparaiso, with 25 tons of bars. At Swansea—Carmelita, from Tocopilla, with 340 tons of ore and 325 tons of regulus; Glamorgan, from Chanaral, with 840 tons of regulus; W. H. Harkness, from Pena Blanca, with 660 tons of regulus; Uncas, from Carrizal, with 630 tons of regulus; Pembroke Castle, from Carrizal, with 600 tons of regulus; Mira Flores, from Carrizal, with 740 tons of regulus; Emily Waters, from Duendes, with 260 tons of ore and 44 tons of regulus. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at—

Ores	Regulus	Bars	Ingots	Barilla.
Liverpool	1559	1278	13,113	—
Swansea	3493	7181	1,265	—
Total	5052	8459	14,378	—

Representing about 19,200 tons of fine copper, against 2

were working in poor ore, and a cablegram arrived shortly after with the words "In splendid ore."

Emma shares have remained without change, and are nominally quoted 2 to 2½; to the official circular, which we published last week, Mr. Macdougall has replied, and again protests against the legality of the ballot, and will seek to throw upon the directors personally the costs of the proceedings he has commenced to declare the election null and void. The hasty change of policy now announced of expending the funds of the company in prosecuting people in America is a matter Mr. Macdougall submits to the very serious consideration of the shareholders, and urges the necessity for the special general meeting which he asks the shareholders to convene. Flagstaff shares have continued to decline since the meeting on Monday (reported elsewhere), and close 3½ to 3½. It will probably be recollect that at the special meeting, held three weeks since, a proposition, initiated by the board, was made that the board be authorised to take such steps as counsel may advise, still having authority to enter into any compromise deemed best for the true interests of the company; this proposition was negatived by an amendment requesting the retired chairman to resubmit his position. At the meeting on Monday it was found that the late chairman had positively declined to accede to the request. The board, upon legal grounds, refused to entertain any new proposition, and retired. A small section of the shareholders subsequently held an informal meeting, at which three shareholders were nominated to confer with the vendor, and report the result to an adjourned meeting which the directors are to be solicited to convene. It need hardly be mentioned that this action is in direct hostility to the newly-constituted board. Tecoma, 3 to 1; in accordance with the resolutions passed by shareholders subscriptions have been invited for 20,000 shares of 17 each, bearing a preferential interest of 20 per cent., and at the same time (at the option of the shareholders) for a rateable subscription of 5s per share, for the purpose of instituting such proceedings against the late directors and others as counsel might advise. A sufficient number of preference shares not having been applied for to justify an allotment, an offer was made to the subscribers to transfer the amounts to the Defence Fund, which, with a few exceptions, was accepted. Negotiations were simultaneously carried on with the vendor so as to adjust his claims, recover possession of the mines, and obtain a restitution of at least a portion of the purchase-money. In order to meet the views of the vendor, and to test his sincerity, one of the directors resigned, in order to obtain an amicable and satisfactory settlement; but after having exhausted every means in their power to come to a friendly arrangement, they have failed to secure such moderate and reasonable terms as they could conscientiously advise the shareholders to accept. The only approach to an arrangement has been that if the company raises 6000/- for working capital, and gives the vendor a voice in the management, he will consider giving up possession of the mines, free of all claims. Under these circumstances further temporising was considered useless, and accordingly a bill was filed against the late directors and others—including the vendor—on July 4. A firm and vigorous policy is regarded as alone likely to rescue the company from its present position. Regarding the mines, it appears that ore is being raised at the rate of 20 tons daily, that the furnaces are running bullion, and that there is a fair prospect of the property turning out valuable and remunerative. Last Chance, 1½ to 1½; Utah, 1½ to 1½; Mr. Longmaid reports that he is producing about 90 tons of dressed ore per week at present, leaving a considerable profit. In another column will be found a letter from him, and we also publish a telegram received from Mr. J. C. Bateman stating—"Mine looking well; mill working splendidly; profit \$200 daily;" thus confirming Mr. Longmaid's information as to making a considerable profit. New Pacific, 3 to 2½; the agent is energetically pushing on the underground operations, and a letter with full details will be found in another column.

Sweetland Creek, 4 to 4½; the operations here are being continued in the usual way. There is not any news to hand to cause the fall in the price of shares. Birdseye Creek, 2½ to 3½; the annual meeting was held on Thursday; a full report will be found in another column. The chairman stated that, in his opinion, the company had as yet hardly begun to reap the advantage of the Neece and West Tunnel. He anticipated a very prosperous future for the company. The falling off in the result of the last clean-up was satisfactorily accounted for in letters since received, which were read to the meeting, and are given in another column. Cedar Creek, 2 to 2½; Col. Ludlum writes that he is steadily washing; he expects to get two runs on the Yankee claim this season. Blue Tent, 5 to 5½; the superintendent's letter will be found in another column. The work on the ditch was being pushed forward with all speed. The current run on Enterprise claim was expected to be good. The visit of the chairman to the mines is regarded with satisfaction. Gold Run, 3 to 4; the latest advices appear in another column, and are of a satisfactory character.

Advices have been received by the intermediate West India mail from several of the Colombian mining companies, and there has been a good deal of business in the shares. Tolima, 3 to 4; an extraordinary result has been obtained from the first trial of the newly-discovered alluvial gold deposit; \$990 worth of gold dust was obtained at a cost of \$2136, and it is stated that with 200 in. of water eight times the amount of work was produced; this result might be done every 24 hours. Malabar, 3 to 4; further interesting advices from this mine will be found another column, by which it will be seen that the mine is opening out with every prospect of success. The gravel as far as exposed is most promising.

Colorado Terrible, 3½ to 3½; these shares have been depressed without any real cause. As an instance of the frequent inconsistency in the prices of shares, these were the same price this time last year with the debentures unpaid, besides several other debts. All this has arrived in Liverpool, being the first instalment towards the next dividend. The whole of the summer's produce, besides 2000 tons now in course of concentration is available for forthcoming dividends. Sierra Buttes, 2 to 2½; the June working has resulted in a return from the Sierra Buttes Mine of \$45,260 against a cost of \$21,734, and from Plumas Eureka \$14,064 against a cost of \$11,438.

Cape Copper shares have declined to 26, 27; the yield from Ookiep for May was 765 tons, of 32 per cent., and Spectakel 57 tons of 32 per cent., including about 120 tons from the Ookiep, and 15 tons from the Spectakel surface reserves. On June 23, 314 tons were sold by public ticketing, at an average of 15s. 7d. per unit, realising approximately 16,300/-; and 705 tons of ore and regulus have been put forward for sale by public ticketing on July 21. Scottish Australian, 1½ to 1½; for the four weeks ending April 22 the total gold obtained was 852 ozs., the average yield having been 3 dwts. 22 grs.; the profit on the month was 62. Don Pedro, 3 to 3½; the produce for May was 4600 oits., of the value of 1958/-, against a cost of 2749/-, showing a loss of 784/-; for the corresponding month of last year the produce was 3802 oits., Rossa Grande, 2½ to 2½; the produce for May was 1053 oits., valued at 42/-, against a cost of 725/-.

Van, 25 to 30; there is no alteration at the mine. The usual quantity of ore will be sampled on Monday. Van Consols, 3 9-16 to 3 11-16; the south wall of the great Van lode has been reached in the cross-cut (25 under adit) from main shaft. The lead-bearing portion being towards the north wall, there is every reason to believe that when reached it will be found to be similarly productive as in the winze further east. The 25 will be driven with all speed to open out ground as rapidly as possible, as all the level is expected to be in ore. The meeting will be held shortly, and the position of the mine should be a source of congratulation to the shareholders. Great West Van, 3 to 1; every advantage should be taken by the management to make up for the serious delay caused by the drought of the past few months, there being now a plentiful supply of water. The large accumulation of ore can now be dressed. The various points of the mine are looking well. We understand the meeting will be held early next month. Bog, 3 to 1; the agent reports a good improvement this week in the 163 west on Whitestone lode, where the end is worth 20/- per fathom, with every appearance of leading to a rich bunch of ore. A very fine specimen has

been received at the offices of the company. Pennerley, 1 to 1½; Potter's Pit portion of this mine is looking very well, as will be seen from the report in another column. Other parts of the mine without alteration.

Subjoined are the closing quotations:

Bog, 3 to 1; Carr Brea, 32½ to 67½; Cook's Kitchen, 11 to 12; Devon Great Consols, 13½ to 14½; Doleath, 46 to 48; East Caradon, 1½ to 1½; East Lovell, 12 to 12½; East Van, 3½ to 5½; Great Laxey, 11 to 12; Great Wheal Vor, 1½ to 3½; Hindston Down, 1 to 1½; Marke Valley, 9a. to 11a.; Pennerley, 1 to 1½; Perkins Beach, 1½ to 2½; Parys Mountain, 9a. to 11a.; Penstrehyl, 1½ to 2½; Roman Gravels, 14 to 14½; South Condurrow, 3½ to 4; Tincroft, 32 to 33; Tinkerville, 8 to 8½; Van, 25 to 30; Van Consols, 3½ to 3½; West Bassett, 9½ to 10; West Chiverton, 3 to 3½; West Tankerville, 1 to 1½; Wheal Grenville, 4 to 4½; Birdseye Creek, 2½ to 3½; Cedar Creek, 2 to 2½; Cape Copper, 26 to 27; Colorado Terrible, 3½ to 3½; Chontales, 1½ to 2½; Don Pedro, 5½ to 5½; Elverhard and Aurora, 2½ to 3½; Emma, 2 to 2½; Flagstaff, 3½ to 3½; Frontino and Bolivia, 4½ to 6½; Independence, 2½ to 3; Last Chance, 1½ to 1½; Malpaso, 3½ to 5½; Malabar, 10s. to 12s. 6d.; New Pacific, 3½ to 4½; New Quebrada, 3½ to 3½; Port Phillip, 3½ to 4½; Rio Tinto, 3½ to 4½; Ries, 3½ to 5½; Richmond Consolidated, 5½ to 5½; Sweetland Creek, 4 to 4½; ex div.; St. John del Rey, 242½ to 247½; Utah, 1½ to 1½; United Mexican, 3½ to 3½.

COLLIERS AND IRON COMPANIES.—A noteworthy feature of the week has been the large and varied transactions in the shares of Cleo Hill Colliery, several hundreds having changed hands, at prices varying from 7s. 6d. to 8s. 6d. There is considerable enquiry for the shares in Bilson and Crump Meadow Colliery, stimulated in a great measure, probably, by the excellent dividend declared at the statutory meeting, but there are few or none offering, though buyers offer a high premium; closing price, 4½ to 4¾. The directors of the Cardiff and Swansea Steam Smoke Coal, in anticipation of the annual meeting, called for the 20th inst., have issued their report. Although the company for some time past has only been receiving £50 per ton for coal that three months ago readily fetched 2s, the directors are able to announce that the operations of the year represent a clear profit of 40,934. 45. 6d., which they propose to deal with as follows, after paying the interest on the debentures—a dividend of 6s. 6d. per share, free of Income-tax, making with the interim dividend of 3s. 6d., 10s. for the year on the 4½ shares; this will absorb 10,337. On the vendors fully paid shares (10/-) 25s. per share will be paid, representing a sum of 16,657. 10s. Then there remains a surplus of 5901. 10s. 2d., and of this it is proposed to set aside 4000/- as a reserve fund, and carry forward the balance to the next account. The total expenditure on capital account during the year has amounted to over 51,000/-, of which nearly 45,000/- has gone to the erection of the necessary building and machinery. The agent, in his report, announces that of the 100 new cottages erected at the Resolven Collieries 68 are occupied, and the remainder will be ready in about four weeks. We observe that the total output has been 141,072 tons of coal. Shares close 4 to 4½. Merry and Cuninghame, 6s. to 7s.; New Frechell, 3½ to 4½; Whitehaven Iron, 1½ to 2½; Altarn Colliery, 4½ to 5½; Silksone Fall, 3½ to 3½; Newport Abercarn, 3 to 3½. The letters of allotment of the 100% debentures of three amalgamated collieries—Dynevor, Dyrfray, and Neath Abbey—were posted on Wednesday evening. It is believed, looking to the powerful board of directors, that the public have given strong support to the scheme. Chapel House, 4½ to 4½; Thorpe's Gawber Hall Colliery, 15½ to 16½; United Bituminous, 1½ to 1½; West Mostyn, 2 to 2½. The ninth ordinary meeting of the Great Western Colliery will be held on the 27th inst., at Cannon-street Hotel. At the conclusion of the ordinary business the meeting will be made special to make certain alterations in the Articles. We shall give a resume of the directors' report next week.

THE ROYAL AQUARIUM AND SUMMER AND WINTER GARDEN SOCIETY has been incorporated, with a capital of 200,000/-, in shares of 5/- each, to purchase a freehold site between the new Government Offices and Victoria-street, facing the Houses of Parliament and Westminster Abbey, and erect thereon a conservatory, promenade, concert hall, &c. The Council of Fellows includes noblemen, theatricals, lawyers, vocalists, musicians, and others, and the prospectus states that their names are a guarantee that the undertaking will be carried out on sound principles, and that the building will become one of the most fashionable resorts in the metropolis. The institution promises to combine the attractions of the Alhambra, Royal Polytechnic, and Cremorne Gardens. The centre and main conservatory of the building will be constructed principally of glass, forming a large conservatory and promenade surrounded by galleries. In this a concert will be held every afternoon and evening. The band will rank second to none in the world. Special concerts (vocal and instrumental) will be held every Saturday, at which the most eminent and favourite artists will appear. Performances of an attractive and varied character will also take place on stated days. At Christmas an entertainment will be provided specially acceptable to children and families. The aquarium will be a special feature and novelty, being the first of its kind established in London, and no pains will be spared to render it at once the most complete and instructive aquarium in the world. The experience already gained in the construction and management of the Brighton, Crystal Palace, and Manchester aquaria will be fully utilised, and prove highly advantageous in the completion of the present enterprise. It may be specially noted that the marine Aquarium has of late years proved one of the most attractive places of resort for all classes of society. It is stated in the prospectus that similar institutions in the larger continental capitals have invariably proved a monetary success, whilst the Brighton and Crystal Palace Aquariums—both of which return good paying dividends—may be specially pointed to as very successful instances of a like enterprise in this country. The 100% shares of the Brighton Aquarium now stand at a premium of 30 per cent. It is confidently anticipated that this enterprise, favoured as it is by its central and unrivalled position in the metropolis, will prove the medium of a safe and profitable investment, and that the shares of the society will command a higher value than those of similar successful institutions. In addition, the society will always possess a substantial security in the freehold land, a property that will materially increase in value every year. In connection with the main building there will be rooms for private concerts and for the delivery of popular lectures on matters pertaining to science and art, and other subjects of public interest. The hall will be so arranged that artistic, literary, and private societies can engage it for the purposes of meetings, conversations, &c. A reading and writing room, as well as a library, will also be opened for the use of visitors. Subscribers for ten shares are to be entitled to nominate one life admission, and subscribers for twenty three life admissions. The prospectus will shortly be published.

The HALL-O-LEE AND STANFIELD COLLIERIES COMPANY are inviting subscription at par for 1400 EIGHT PER CENT. FIRST MORTGAGE DEBENTURES of 50/- each, redeemable by annual drawings at 55/- per debenture, the whole of the company's property being vested in trustees to secure the payment of principal and interest. The engineers estimate that the present pits, engines, and machinery now in complete working order at the Stanfield Colliery, and in course of completion at the Hall-o-Lee Colliery, are equal to an output of 7000 tons weekly, and by the sale of only 5000 tons coal per week, the whole of which would be readily taken in the district at an average price of 10s. (the present price per ton realising 15s. 6d.), after deducting the cost of raising to bank, royalty, and all expenses, and delivering into railway trucks, boats on canal, or carts, a weekly profit of 1000/- would be realised. The collieries are situated close to Burslem, in North Staffordshire, and in the midst of the iron and pottery district, within a few miles of Crewe, Stoke, and Macclesfield, and in direct railway communication with Liverpool, Manchester, and the manufacturing districts. They comprise an area of 239 acres—the Stanfield Colliery, 60 acres; the Hall-o-Lee Colliery, 179 acres. At Stanfield the present output is less than formerly, and averages 850 tons per week, yielding a net profit of about 7500/- per annum. This decreased output is owing to extensive winning operations being carried on underground, which for the time interfere with the raising of coal. But in three months, when these new works are completed, the output can easily be increased to 2000 tons and upwards, yielding a profit which alone would be sufficient to provide for the amount necessary to pay the interest on the debentures and for the sinking fund annually. There are also on other portions of the property seams being opened up of coal, ironstone, and oil shale. The ironstone is of a superior quality, averaging 40 per cent. of iron. It is calcined on the mine, and readily sells at 18s. to 20s. a ton. At the Hall-o-Lee Colliery the four upper seams are being thoroughly opened, from which an output of 5000 tons and upwards a week may reasonably be anticipated before the end of a year from this date. The property, owing to the unusual number and thickness of the seams, their close proximity to each other, the high quality of the coal, and the facilities offered for cheap and rapid working, should become one of the largest and most profitable collieries in North Staffordshire. The prospectus will be found in another column.

The CARDIFF AND SWANSEA STEAM COAL COMPANY's report, so far from being a disappointing one, as was stated in last week's Journal upon what was believed to be reliable authority, is decidedly encouraging, although the promises of those who are now in opposition have not been fully realised. The coal sales for the year amounted to 141,072 tons, which realised 124,994. 19s. 8d., and the profit on the sales of coal, ironstone, stone, &c., was 40,934. 4s. 6d. Upon capital account there had been expended for new works, plant, machinery, &c. (including 6530. 10s. for cottages), 51,451. 11s. 7d., all of which may be regarded as productive expenditure. No fear need be entertained that there be difficulty in providing for the debentures, without endangering dividends as they become due. The reports will be found in another column, and the statements of accounts are very full and explicit.

* * * With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Original Correspondence; Coal Mining in Italy (P. Le Neve Foster, jun.); Sulphur in Sicily (W. Sheldford); Nova Scotia Items; Mining in Nevada—the Great Comstock Range; Iron Mines of Cornwall; Cornish Mining; Dividend and Progressive Mines (R. Tredinnick); West Great Cornish Mine—the Cost Book System (H. G. Sharp); West Wheal Lucy—Dynamite as an Industrial Agent—Museum of Inventions—The Silver Light—Foreign Mining and Metallurgy—Foreign Mines Reports—Patent Matters, &c.—Meetings of the Flagstaff, Birdseye Creek, Tylwyd, South Ward, South Cardon, South Carr Brea, Gunnislake (Clitters), Wheal Uny, Bradda, Belstone, and Aberdaunant Mining Companies.

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Notices to Correspondents.

* * Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt; it then forms an accumulating useful work of reference.

Will "Allendale," &c., please send name and address, under cover, to the *Mining Journal* Office, and "M. W." will communicate direct.

QUOTATIONS FOR MINE SHARES.—We have frequently stated that, with regard to the quotations of many mine shares, it would be impossible to sell them at the quotations given in the Share List—or, indeed, to effect a sale at any price whatever in the market; yet, as the transactions are vouchered for as having taken place, we are bound to record the prices as business done. It should be understood, however, that the prices are only those obtained by the promoters or others in a similar position from the public.

Received.—"G. W."—"N. B." (Castleton)—"W. J. E."—"E. G." (Halifax)—"J. M." (Newcastle)—"A. Subscribers"—"J. B."—"J. W." (San Francisco)—"R. A." (Hyde)—"D. R." (Colorado)—"G. B. L." (Wheat Pevor)—"A. P. G." (Brentford)—"W. H."—"S. L. and Co."

SCALE FOR ADVERTISEMENTS.—Our charge for general advertisements is—**1s.** for six lines and under, **4s.** per line afterwards, **8d.** Average, 12 words per line.

AMERICAN SUBSCRIBERS.—In reply to several enquiries, it may be stated that subscribers in the United States can be supplied with the *Mining Journal*, post free, at the price of \$8 50c. gold per annum, payable in advance, by remitting to Mr. D. Van Nostrand, publisher, and importer of scientific books, &c., Murray-street, New York; or, direct to our Office, 26, Fleet-street, E.C.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, JULY 18, 1874.

ASSURANCE OF COLLIER OWNERS AGAINST STRIKES, &c.

The great strike of the colliers in South Yorkshire and North Derbyshire has led to a very important step being taken by the colliery owners in those districts. They have adopted the well-known maxim, that the best means of averting a war is to be prepared for it, and have formed themselves into an association, with a capital of 200,000*l.*, to afford relief to members subjected to losses by strikes of workmen, as well in respect of the expenses of the pits as of the failure of profits during the strike. They also propose by the new combination to assist in the settlement of all disputes between members and their workmen, and to pay expenses incident to such settlements. The draft Articles of the Association have been framed by Mr. ROBERT BAXTER, the well-known parliamentary solicitor, of Victoria-street, Westminster, and who is one of the largest colliery owners in South Yorkshire. The rules are drawn up with great clearness, and we have every reason to believe that when known they will be adopted in several of those mining districts where strikes are of frequent occurrence. At the present juncture, therefore, a notice of the leading rules, we feel assured, will be read with interest by those interested in mining property.

It appears that the capital of the company is divided into 10*l.* shares, and that a person wishing to join it shall state in writing the name of the colliery desired to be admitted, the number and names of the pits worked, with the name and residence of the person by whom the firm is to be represented; also the total number of tons of coal raised in each pit during the previous year, and the profit per ton which it is sought to assure. These returns are to be sent to the secretary, as made up yearly to Dec. 31. Such are the preliminaries necessary to be made before a person is admitted to the benefits of the association. But before he becomes an actual member it is required that he shall subscribe for two shares in respect of every 1000 tons of coal raised annually, and deposit a promissory note to the amount of 10 per cent, on the total sum in respect of profits assured in each year payable to the association. Such promissory notes are to form a guaranteed fund, and the board when necessary can demand of them to meet calls or liabilities. But cash payments may be made instead of promissory notes, and the amount invested in Consols, and the interest paid to the depositor. In the appointment of directors, each firm raising 100,000 tons of coal per annum, or less, is to be entitled to one vote, and to an additional one for every 100,000 tons, or any fractional part thereof in excess of the first-named quantity.

As the compensation clauses are of the greatest importance, and they be of use in districts where similar associations are likely to be started, we give the principal ones in full. In clause 11 it is stated—

"Each firm shall assure its profits at such a rate, not being less than 1*l.* nor exceeding 2*l.* per ton, as may be agreed upon with the Finance Committee after considering the special circumstances of the colliery. The assurance payment to be made in each case by the Association in respect of profits shall be based on the quantity of coal actually being worked at the time when the pit was put on strike or restriction, taken on the average workings during the previous three months, such average not to exceed the rate at which the colliery is assured. The contribution from each firm to all liabilities of the Association for payments of assurance, expenses, or otherwise shall, as to expenses, be based on the last returns of tonnage, and as to assurances be based on the amount of notes given, and calls will, from time to time as required, be made on each firm in due proportion after this rate. Each firm shall be at liberty from time to time to amend its returns of quantities being actually worked by giving one month's previous notice in writing. Such amended returns not to extend over a less period than three months prior to the date thereof, it being the intention of this Association that each pit should be assured as closely as possible upon the actual workings."

A ample provision is made as to the mode of making out a claim for compensation for a strike or restriction, which is to be in detail, showing each item claimed for, and placed before the Finance Committee, who have power to appoint mining engineers or accountants to investigate the claim and report thereon to the Committee. But no claim for assurance or expenses is to be allowed for less than three consecutive days off work. Coke ovens connected with a colliery can be assured upon the quantity of coke manufactured at a sum to be agreed upon with the Finance Committee. Another very important rule is that relating to the rate of wages paid, advances made, or alterations in working hours, all of which, it appears, are to be subject to the approval of the board. The rule states that—

"No advance in the rate of wages payable to workmen, or concession or variation in the terms of their contracts, occasioning additional payment to them, or any advantage in the rate of wages, or an alteration in the number of their hours, shall be made or agreed to be made by any member without the previous consent of the board, except in the case of growing boys; provided that nothing in this rule contained shall prevent such a modification of the wages payable, or an allowance being made to any workman in respect of any peculiar condition of a seam, or of his working place therin, as under the circumstances may be reasonable to meet the exceptional state of things; but no modification or allowance shall be made with the intention of making any advance in the general rate of wages payable to any class of workmen."

The Association takes full power to determine when there shall be resistance to the demands of the workmen leading to a strike, by which the owners shall be entitled to indemnification for expenses incurred, as well as loss of profits. The same is also the case with regard to a lock-out, for it is provided by rule 18 that—

"A lock-out shall not be determined upon unless at least a week's notice has been sent to each member that the subject will be considered at a time and place to be stated in such notice; nor if members holding one-fourth in number of votes determine against it a meeting then held, or at some adjournment thereof. In case of such lock out being determined upon each firm shall, from the day of the lock out, pay all its own expenses. No claim shall be made on the funds of the Association for such expenses."

It further appears that no member of the Association is allowed to hold out any inducement, pecuniary or special, to any workman to enter into his service, beyond the ordinary wages paid at the colliery, nor employ any workman on strike or lock-out at any colliery belonging to the Association. This course we believe is generally adopted in most colliery districts, and, as might be expected has met with the greatest opposition on the part of the men; and how far it can be legally carried out is a question which few out of the legal circle will be able to determine. We may, however, say that combinations that tend to the restraint of trade are not legal. Still, there is very little doubt but what has been done by such an astute lawyer as Mr. BAXTER will be right and within the lines of the law; and although it may appear somewhat arbitrary to refuse to allow a man work at one place because he has left another one, still it is excusable where large numbers of men band together and use a part of the wages they earn to injure the class from which they receive

them. By this means the masters have frequently found the money with which they have themselves been fought and injured. There are heavy penalties for contravention of any of the rules, for it is enacted that—

"Any member of this Association acting, either by himself or his agent, in contravention of any of the rules of this Association, shall, after full enquiry made into the matter, and after the member concerned has had full opportunity of being heard, be, at the discretion of the Association, fined in a penalty not exceeding 10*l.*; and in case of continued contravention, by such further daily penalty, not exceeding 5*l.*, as may be determined."

Such is an outline of some of the most important features of the new association which the present position of the miners in South Yorkshire and North Derbyshire has been the means of establishing. That it will be successful there appears to be very little doubt, for we understand that a considerable number of the share-holders have already been subscribed for by a good many of the largest colliery owners in the districts named. The miners have one of the most powerful organisations in the kingdom, with a very large capital, and the wonder is that the proprietors of our coal mines have not before now had a similar combination for defensive purposes.

MINERAL COAL AT THE VIENNA EXHIBITION.

A particularly interesting report by Mr. J. PECHAR, of Teplitz, whose name is well known in connection with railway management, and Dr. PEREZ, on the coal exhibits at the recent International Exhibition at Vienna, has just been reached in the series of Official Reports now being published at the Imperial Printing Office at Vienna. After pointing out the extensive application of coal by remarking that in the entire Exhibition there was scarcely an industrial exhibit in the production of which coal in one form or another has not been employed, for in what business does not heat, light, and machine power hold the first place; and reminding us of the various arts and manufactures in which it is employed, it is observed that the importance of coal is, so far as we are concerned, immeasurable, since it has made modern Europe what it is to-day—the industrial workshop of the world. The coal exhibits on the Prater were but representative specimens of the seams and of the colliery interests of the countries whence they came, yet they form the basis of much useful study. The progress and changes which have taken place in the technology of coal since 1867 is carefully pointed out—GALIBERT's apparatus for entering mines when filled with foul gases, the various coal-cutting machines of FIRTH, BROWN, SIMPSON, and others, &c., being fully referred to. It appears that in 1872 the coal production of the entire earth amounted to 256,275,824 metric tons (the metric ton is 36 lbs. lighter than the English ton, and 4 lbs. heavier than the American ton), nearly one-half of which was raised in England, one-sixth in Germany, one-sixth in the United States, France, Belgium, Austria, and other countries following for smaller quantities. The subjoined table will prove of general interest.

	Production in 1872.	Percentage of total production.	Population of each country.	Production per head of population.	Metric tons.	Metric lbs.
					Metric tons.	Metric lbs.
England	125,473,273	48.96	31,817,108	7887.15		
Germany	42,324,469	16.52	41,058,139	2061.68		
United States	41,091,135	16.19	38,650,000	2147.02		
France	15,900,000	6.20	38,469,875	871.95		
Belgium	15,658,948	6.11	5,087,105	6156.33		
Austria	10,443,998	4.07	35,904,435	581.76		
Russia	1,097,832	0.43	82,172,922	9.72		
Australia	942,510	0.37	1,958,350	662.40		
Other countries	2,943,659	1.15	260,810,980	22.57		

Messrs. PECHAR and PEREZ inform us that of the 125,473,273 metric tons of coal raised in England, 40,600,000 tons are consumed by the iron trade, 27,400,000 in manufactures, 20,500,000 for domestic purposes, 8,100,000 for gas and water works, 8,000,000 in mining, 3,600,000 for steam navigation, 2,200,000 for railways, 900,000 for copper smelting, 900,000 in sundry industries, and 13,200,000 tons (or over 10*l.* per cent.) are exported. The particulars relative to Germany, France, the United States, British colonies, &c., are equally interesting, and the report is altogether an exceedingly valuable one, and will long be useful to refer to for any fact, whether historical or statistical, connected with the coal industries. Messrs. PECHAR and PEREZ have done good service to the colliery interests generally, and their contribution to the official volume will certainly much enhance its worth.

THE DUKINFIELD EXPLOSION.

Not the less emphatic because it is silent is the censure passed by a jury of neighbours on the verdict which was recently returned concerning the Dukinfield Colliery explosion, and which was commented upon in these columns a fortnight ago. Of the 54 persons whose deaths were the result of this calamity four were brought to the surface alive, and were removed to the infirmary in Ashton-under-Lyne, where they died. Ashton is in the county of Lancaster, while Dukinfield is in Cheshire, and therefore two enquiries were necessary. As a matter of course, the chief interest has centred in the inquest relating to the largest number of deaths, and, moreover, to that enquiry were sent the Government barrister and an additional Inspector, who were to assist Mr. THOMAS WYNNE, the Inspector for the district, in the investigation. At the same time the proceedings in the adjoining county commanded considerable attention, and especially since the publication of the Cheshire jury's sweeping verdict has there been much division of opinion as to whether it would be endorsed by the Lancashire jury. For it was known that on the Lancashire side, although the jury did not include either clergymen, or magistrates, or surgeons, there had been summoned a large proportion of practical men, who had not to pick up their knowledge of colliery work as the inquest proceeded, but were either actually engaged in mining affairs, or had spent some considerable portion of their lives about collieries. The Lancashire enquiry, too, was under the direction of a coroner whose district contains a very large number of collieries, and who has had charge of many important enquiries into mining disasters. This is said without intending to convey the slightest reflection upon Mr. JOHNSON, who so ably conducted the Cheshire enquiry; it is simply a question of experience, and Mr. JOHNSON would probably be the best man to contend that his inquests had made him as competent in this respect as Mr. PRICE, whose work in East Lancashire is limited to what is in the main a colliery district.

Mr. PRICE carefully directed his jury that they must be satisfied as to the facts of the case before they attempted to come to a decision, and as he had evidently paid diligent attention to the proceedings before Mr. JOHNSON, he was able to give his jury every assistance in grasping the main points of the evidence. They were not bound, he said, in his summing up, to follow the verdict of the Dukinfield jury as a precedent, but he bade them consider whether they would go the length of concurring in the censures passed in Cheshire. They did not so concur in their verdict; they attributed the explosion to the same cause as had the Cheshire jury, and, in fact, used precisely the same phrase in describing it, but beyond this they did not go a step. The high-flown and studied phrases in which the Cheshire jury condemned everybody were treated with sublime contempt; and evidently, in the opinion of the Lancashire men, the allegations as to "complete anarchy" having prevailed in the pit, as to the employment of incompetent persons, as to the misconduct of the proprietor, the manager, the underlookers, and almost everybody who had ever been seen about the place during the last ten years, have not been proven.

There was a great difference between the two enquiries in one important respect. At Dukinfield the whole inquest was made into a personal matter; at Ashton the enquiry has been purely practical. The Lancashire men, for instance, asked no such questions as to how the managers had been paid; in the Cheshire enquiry questions on this subject were so numerous that the coroner had at last to request that the jurors would not make the inquest a means of gratifying their private curiosity. At Dukinfield Mr. HILTON's certificate as a manager was simply ignored, and so keenly did the Crown barrister press Mr. HILTON as to his ability that Mr. PEACE had to prove, and did prove step by step (and in a way that put an end to the matter during the whole enquiry), what had been the character of Mr. HILTON's professional career, and what opportunities he had had for qualifying himself for the post he held. On the other hand,

the Lancashire coroner, Mr. PRICE, at the outset of his enquiry said he should certainly assume that Mr. HILTON was a competent man until it was proved to the contrary, and declined to receive evidence as to his career and ability.

These examples will suffice to show how the two enquiries differed essentially in the way of going to work, and the same characteristics are to be found in their verdicts—one is decidedly personal, the other goes straight to the point, and is decidedly practical, admitting regretfully that the evidence did not enable this jury, any more than it did the other, to bring the blame home to the man who did all the mischief.

The evidence of Mr. WYNNE, the Government Inspector, who for nearly a quarter of a century has had charge of the district, showed that he by no means agreed with the Cheshire verdict on many of the principal points on which he was examined by Mr. PRICE. He was questioned specially as to what has been said in the Cheshire verdict about Mr. HILTON, the manager, and his replies showed that in his opinion Mr. HILTON had done all that could have been reasonably expected of him, and had certainly not laid himself open to the serious charge of having failed in his duty.

GOVERNMENT INSPECTION OF STONE QUARRIES.—A few weeks since Mr. Lionel Brough, Inspector of Mines, made tour amongst the underground Bath stone quarries at Box Combe Down, Farleigh Down, Bradford Coreham, and Limpley Stoke, with a view of including them for Government inspection under the new Mines Act. A schedule of the quarries has been completed, and Mr. Brough has supplied to each quarrymaster a list of instructions. One of the most important of these prevents boys under 13 years of age labouring in underground quarries. The quarryowners affected have just discharged the boys employed on their works. Upwards of 200 have been thus discharged, causing some inconvenience to the gangers, or sub-contractors, who are responsible for the actual work done.

SILVER MEDALS FOR USEFUL INVENTIONS.—For miscellaneous inventions and essential improvements not included in the ordinary nine years' rotation of machinery and implements the Royal Agricultural Society, at their meeting at Bedford, have just awarded their 10 silver medals for the following articles:—To the Reading Ironworks Company, for their 4-horse power patent "nozzle" vertical boiler; to John Fowler and Co., for their patent four-wheel windlass for steam cultivation on the stationary-engine system; to W. N. Nicholson and Son, for the adaptation of self-acting delivery to a horse-rake; to Barford and Perkins, for their 10-horse power agricultural locomotive engine, the driving-wheels being utilised as winding-drums; to G. Lewis and Son, for their new patent machine for elevating, shooting, loading, and unloading sacks of corn and other articles; to Fairbanks and Co., for their 3-ton weighbridge for carts and wagons; to W. R. Dell and Son, for their duplex grain-sorter for separating round seeds from wheat; to Ransome, Sims, and Head, for their patent straw-burning apparatus attached to a 10-horse power portable steam-engine; to Clayton and Shuttleworth, for their variable expansion motion acted on by the governor attached to a 7-horse power portable steam-engine; and to Davey, Paxman, and Co., for their new patent "Paxman" water-heater.

TECHNICAL EDUCATION—THE RHENISH-WESTPHALIAN POLYTECHNIC SCHOOL AT AIX-LA-CHAPELLE.—The programme for the session 1874-5 has just been issued, and although the school has been but four years in existence it has already gained a substantial position, the number of students attending the courses being no less than 467, of whom two are Englishmen. The school has a staff of 20 ordinary professors, 3 extraordinary professors, 14 assistants or demonstrators, and 2 private tutors; the whole of these being gentlemen of acknowledged ability and considerable experience in teaching, and who are ever ready to give their students the full advantage of their knowledge, whether in or out of the class-room; yet the aggregate fees for attending 41 classes amount to only 6*l.* a year for regular students and 10*l.* for others. The course of instruction is such that the student who has gained the diploma to which the course leads would, after a comparatively limited amount of practical experience, be fitted for the most responsible position in connection with the industry for which he has studied; for, as the sound general technical training of the first three years is supplemented in the fourth year by special courses according as the student intends to devote himself to architecture, engineering, or mechanical industry, no more complete scientific preparation need be desired. We shall refer more fully to the school in a future Journal.

RUBY CONSOLIDATED MINING COMPANY.—Vice-Chancellor Malins' decision in favour of H. W. Askew, referred to in the *Mining Journal* of June 27, has been reversed by the Lords Justices of Appeal. Lord Justice James said the Vice-Chancellor did not appear to have apprehended that in making this order he was really determining the very matter which would have to be determined in an action by Askew against the company for money had and received; and Lord Justice Mellish said that here the only question was whether Askew was entitled to recover back the money he had paid. That question would be more properly tried in an action, for it involved very serious charges of fraud against gentlemen of respectability who were directors of the company.

PATENT GAS COMPANY—NEW SHARES.—Vice-Chancellor Malins, in the case of "Stewart v. Lupton," decided that Lupton, having sold ten shares on Sept. 13, subject to the rules and usages of the Stock Exchange, was bound to deliver the ten new shares, created on Oct. 4, and obtained by Lupton as proprietor of the ten shares sold, although the transfer was not registered until Oct. 13. The shares were dealt in *cum new* until after Oct. 26. The bill amounted to a charge of fraud, and was taken as a representative case, there being six other similar cases against Lupton. The Vice-Chancellor considered that in every view of the case the defendant had had an allotment of new shares in respect of the old shares sold by him to plaintiff, and there must be a decree in the terms of the prayer of the bill, with costs, against the defendant, he being repaid everything he might have paid in respect of calls.

tensive machinery for the thorough development of the property, and it is the opinion of competent judges, amongst whom is Capt. Josiah Thomas, of Dolcoath, that a very valuable and lasting mine will reward the exertions of the few gentlemen who form the South Molton Silver-Lead Mining Company, and of which Mr. A. Lovelock, Coleman-street, London, is the secretary.

REPORT FROM CORNWALL.

July 16.—When we said last week that the next fortnight ought to witness a substantial rise in tin we expressly guarded ourselves against the idea that the ordinary rules of commercial life were the ruling influence in the tin trade. To the fact that they are not it is due that the present week opened with the crushing announcement of a fall—for crushing it is when industry and enterprise have waged a stout fight against adverse circumstances, and are about reaping their reward, to find themselves thrown back even into a worse position than they occupied months ago. What are the present facts with regard to tin? We have a diminished import and increased export, lessening stocks, and an output that has not of late given many indications of an advance. This by itself should indicate a rise in the tin standard as surely as two and two make four. Add to it that the difficulties in the tin-plate trade have ended, and that there must now be an exceptionally brisk manufacture to bring up the exhausted stock of tin-plates, and one seems to have an assurance that is doubly sure. But in smelters' arithmetic two and two clearly do not make four—three is about the total from one side, and five from the other; and so when everyone expects a rise there comes a drop. There are indications that some move of the kind was intended two or three days before the announcement. There were gentlemen—at a distance, too—who predicted that, however fair the aspect of affairs might seem, there were breakers ahead. Those who felt they knew what ought to be treated the advice as of little consequence, but it has come true nevertheless. To us the fact that these hints were given appears to indicate that the current circumstances of the market had little to do with this latest blow at the vitals of mining, and that we must look elsewhere for the cause. Is the rumour true which attributes it to an attempt on the part of smelters to stop the practice of stocking at the mines, which undoubtedly they find rather inconvenient? If so, the idea is cute; but we hope none of the managers who hold large quantities will be deluded. Let them remember that the smelting advice to Mr. Henry Rogers was to sell East Lovell tin at 50%; that he disregarded it, and made 60%. History in these matters often repeats itself. But why should not the mines which are holding in arrange to try their hands at smelting forthwith? There must be a beginning, and a well now as most times. Even the attempt could hardly fail to be of benefit.

When no other topic occupies the mining mind of West Cornwall then the Red River is sure to turn up. A statement has lately been made public that the different steamers in the Red River have been paying dues upon some 30,000*l.* a year; the amount of tin produced per week varying from a value of 445*l.* to one of 166*l.* It has been very absurdly stated that the amounts have been netted by the different companies, as though we had yet arrived at that consummation so devoutly to be wished—the payment of dues on profits only. However, the fact that the works on the Red River do bring into the market some 30,000*l.* worth of tin which escapes from the mines on its course is important enough to merit consideration. Unquestionably our dressing operations are imperfect, or such a large waste could not be; yet the fact that work after work, when treating the same water independent of additions from other mines, is able to make profits of that which has passed over the frames of its predecessor, should make one pause before the dressers were condemned too hastily. There may be instances of exceptional imperfection, or carelessness, but their are others in which within the limits of the mine itself it would be impossible, except at a considerable outlay, to treat the effluent waters over again. This should be remembered, and it should be remembered also, when it is said that so much tin yearly runs into the Red River, that the practical value of that metal is the difference between its selling price and the cost of its recovery.

West Wheal Seton special meeting, on Monday, will be an important one. It is called to consider, and, if approved of, to purchase an engine and other machinery and materials, and until the erection of such engine to determine upon the desirability or otherwise of renting and keeping North Crofty engine at work, in order to prevent an influx of water from the adjacent mines; and also to empower the purser either to overdraw the bank account, or from time to borrow money from the bankers for all or any of the above purposes, and further to consider and, if determined upon, to appoint Capt. Josiah Thomas manager of the mine, in accordance with the recommendation of the committee. It has long been recognised that North Crofty is the key of the district, and that the working of the North Crofty engine is of vital importance to the Setons. But other mines besides West Seton would benefit, and the expense should be fairly distributed.

East Pool adventurers are anticipating a good time coming for the promised demand for tungstate of soda in connection with Dr. Jones's process for making wood uninflammable. East Pool is the only mine that makes its wolfram into this commodity, but although wolfram is somewhat sparingly distributed, there are other bals that have enough of it to enter into the market directly a substantial price is offered. It will be a curious instance of the tables being turned if wolfram, which has made itself so objectionable hitherto, should at last be found to pay.

There is, it seems, hope after all, though the session of Parliament is not to last another month, that the Rating Bill will pass, and the vexed question of the rating of mines be at length settled.

TRADE OF THE TYNE AND WEAR.

July 16.—The Steam Coal Trade in Northumberland continues good, and a large quantity of coal has been shipped lately at the docks in the Tyne, at Blyth, &c.; all the pits are fully employed. The state of the export trade has so far kept the question of the miners' wages comparatively quiet in the northern part of this great district, but in North and South Durham the case is very different; indeed, as all kinds of coal have fallen enormously in value, and it is very difficult to prevent the further fall to prices which, considering the present prices of all kinds of labour, would be ruinous. However, an important meeting of Durham colliers and viewers is to be held this week, when it will be proposed that a large reduction be made in the rates paid all round. The price of best steam coal is still 18*s.* per ton, and secondary sorts 16*s.* per ton. Good house coals are sold at 16*s.* per ton, and according to quality down to 13*s.* per ton. Gas coals are plentiful, at 13*s.* per ton, and a large quantity of this coal has been shipped lately, mainly on foreign account. Manufacturing coal of all qualities is quite a drug in the market, and small coals are sold at very low prices. Large quantities of Duff coal are accumulating at many of the large works, both in Northumberland and Durham, and it is quite possible that the old system of burning large heaps of this coal may again be resorted to at no distant date. It appears therefore, that the present time is more favourable for the manufacture of mixtures of coal and oil, &c., which, when formed into hard bricks, is so useful and valuable for steam and other purposes, and especially for export to foreign countries. The new writings for coal in the district continue to make good progress generally, and the output of coal is consequently being gradually increased.

A correspondent in last week's Journal touches upon a topic of much interest in connection with this district, that is the making of iron at Alston. It is apparent that if the iron ore is of good quality and the limestone can be had cheaply there is no reason whatever why iron should not be made on most advantageous terms. At Consett the furnaces and mills have been amongst the most successful in this district during the last few years, and there the iron ore has to be conveyed a very considerable distance from the Cleveland field. It is true that coal and coke is produced on the spot there (that is at Consett), but coke and coal can be had at only a short distance from Alston, and if good iron ore can be had on the spot at a cheap rate there is no doubt whatever that it is most favourable locality for the manufacture of pig and also finished iron. A large quantity of Cumberland hematite ore is used for mixing with

the ordinary ores of Cleveland, and Alston is more favourably situated for getting these ores than the furnaces in the Tyne, Wear, and Tees.

It has already been announced that the firm of Hopkins, Gilkes, and Co. (Limited), of the Tees-side Ironworks, Middlesborough, have just entered into a contract with the North British Railway Company for the completion of the great engineering work known as the Tay Bridge, near Dundee. This, when finished, will be the longest bridge over a running stream in the world. The total length will be 10,324 feet, or nearly 2 miles, so that it is 1127 feet longer than the Victoria Bridge, Montreal, which is 9194 feet in length, and which has hitherto claimed the distinction that will henceforth be awarded to the Tay Bridge. There are, of course, bridges of considerably greater length than either, although none spanning a tidal river. There is, for example, the Venetian and Mobile Bridge, on the Mobile and Montgomery Railway, which is 15 miles in length, but the greater part of this bridge is carried over great marshes, where the engineering and other difficulties to be surmounted were not at all comparable to those met with in this case; and even after our American cousins had got all due credit for the difficulties they have done in this direction, the fact will still remain that the Tay Bridge is in its way perhaps the most remarkable structure in the world.

BREACH OF THE MINES REGULATION ACT.—At the Guisborough Police Court, Mr. H. C. Briggs, responsible agent for the North of England Industrial Iron and Coal Company, owners of the South Belmont Ironstone Mines, was charged that for above two months subsequently to March 1 he had neglected to give notice to Mr. James Willis, Inspector of Mines, of a change in the manager of the mine, contrary to the Act 35 and 36 Vict., chap. 40, sec. 4. Mr. Maynard, of Durham, who appeared for the prosecution, said that a penalty of 2*s.* had been incurred, but as the act was not wilful he did not press for the full amount. The Inspector thought that as workmen were compelled to comply with the law, it was only right the masters should do so as well. The defendant was ordered to pay a fine of 2*s.* and costs.

MECHANICAL PUDDLING.—Mr. A. Greener, of Brenton Lodge, Darlington, writes to the *Newcastle Daily Chronicle*—“The remarks that appeared in your paper in reference to the reported failure of the Banks's process of rotary puddling may be calculated to lead to the erroneous impression that, because Banks's system has so far proved a commercial failure, we shall be compelled again to resort to hand puddling. It is well that this impression should be got rid of; and all who are familiar with the iron trade must be aware that there is no good reason why hand puddling should still be persisted in. At the Round Oak Ironworks, Dudley, and at the Tadcaster Ironworks, Spennymoor, puddling furnaces have been worked for a considerable time past by mechanical means, on what is known as Dormoy's principle. By this method hand labour is almost entirely obviated; and the results obtained up to the present time, and over a period sufficiently lengthy to prove that they can be permanently and regularly depended on, are of the most satisfactory character. Nearly 3000 tons of iron have been produced with Dormoy furnaces at Tadcaster, with a consumption of not more than 14 cwt. of coal per ton of iron made, whereas the average consumption of coal per ton of iron made in the ordinary puddling furnaces is not less than 25 cwt. But this is not all. The Dormoy puddling furnace gives a decidedly better production of iron than the ordinary puddling furnace, and the quality of the iron is considerably improved. With such results as these, it is absurd to talk of returning to the old and expensive system of hand puddling as the Roine Iron Company have done in America. Mechanical puddling, in one form or another, must become the system of the future.”

REPORT FROM MONMOUTH AND SOUTH WALES.

July 16.—Some little improvement has been evinced in the Iron Trade, but of so slight a character that buyers are not induced by it to speculate freely. More confidence has, however, been displayed by makers with regard to the future, for the fall of the year, it is thought, will bring about a brisker business aspect. The scarcity of water seems to affect the completion of orders, as by it works may possibly be brought to a stand. This will be very much felt in the extensive works in Glamorgan and Monmouth, where water is in great demand, for, though pretty well provided with facilities for keeping large quantities, a few more weeks of a continuous drought will go far to exhaust the supplies. Rain has almost been a total stranger in the district for several months, and surprise cannot be manifested that supplies begin to run short. Cyfarthfa is still idle, with the exception of two pits and a little done at one furnace, the men chiefly having left the district, or passing away their time in wandering about the streets. The largest works, perhaps in the world—Dowlais—has up to the present shown a better state of things than others in the vicinity, but even at these works a total cessation of business is anticipated if the present dry weather should continue, and the consequences resulting therefrom will be of a most distressing nature. The export trade, too, has not been so active this week as in the few preceding ones but the following clearances are reported as having been effected:—Booker and Co., 160 tons (sheet iron) to Amsterdam; Dowlais Company, 1000 tons (rail) to Taganrog; Aberdare Company, 90 tons (rail) to Esberg, and 700 tons to Havannah; Guest and Co. 800 tons, and the Rhymney Company 405 tons to Taganrog. In the Tin-Plate Trade some of the works have been set going this week, but at others the resumption of work has been kept back, from the fact that the men and the employers are still unable to come to an amicable arrangement as to the rates to be paid. In the tin-plate trade generally there is no change of material moment. Trade in coal during the week has been in a declining state, the demand falling short very considerably of the supply. In prices, too, the coal trade is not so firm, although not showing any marked reduction.

The directors of the Cardiff and Swansea Smokeless Steam Coal Company have sent out their report, which shows that after producing 5957*t.* in interest on debentures, a sum of 32,800*l.* will remain for distribution among its shareholders. The following arrangements are recommended by the directors:—The payment of 10,337*l.* for dividend to ordinary shareholders of 10*s.* per share for the whole year, of 4*s.* of which 3*s.* 6*d.* a share interim dividends have already been declared, 1*s.* 6*d.* for present payment of 6*s.* 6*d.* on each share (free of income tax). The payment of 16,637*l.* to vendors, being 25*s.* a share on 10*s.* fully paid up (free of income tax), both equal to 12*s.* 6*d.* per cent. on the respective shares and on the amounts paid. The reserve of 4,000*l.* and the balance 160*l.* is to be carried over to a new account. The dividend is to be payable on the 31st instant.

REPORT FROM SCOTLAND.

July 15.—The Warrant Market, which at the date of our last report was steady at 77*s.* 6*d.* improved on Thursday to 80*s.*, and since then a moderate business has been done betwixt 80*s.* and 80*s.* 6*d.* cash. To-day the price was 80*s.* cash, but the business done was limited. Although the warrant market continues in a rather listless state, there has during the last week been a better demand both for the home markets and foreign shipment, and in consequence makers' prices have advanced, and there are considerable deliveries being made ex store. No business will be done in our Pig-Iron Market on Friday, Saturday, and Monday on account of the fair holidays. We subjoin approximate quotations:—

	No. 1.	No. 3.
G.m.b. at Glasgow (deliverable alongside)	83s. 0d.	81s. 0d.
Gartsherrie ditto	106 0	85 0
Coltness ditto	108 6	—
Summerlee ditto	102 6	85 0
Carnbroe ditto	88 6	82 6
Monkland ditto	85 0	82 6
Clyde ditto	85 0	82 6
Govan, at Broomielaw ditto	83 0	81 0
Langloan, at Port Dundas ditto	107 6	85 0
Calder ditto	105 0	85 0
Glengarnock, at Ardrossan ditto	91 0	83 0
Eglinton ditto	85 0	82 6
Dalmellington ditto	84 0	82 0
Caron, at Grangemouth, selected, ditto	95 0	—
Shotts, at Leith ditto	102 6	83 0
Kinnel, at Boness ditto	83 0	80 0
Bar iron	£10 12 <i>s.</i> to £11 0	—
Nail rods	11 0	—
SHIPMENTS.		
Week ending July 12, 1873	Tons 11,230	
Week ending July 11, 1874	9,352	
Decrease	1,878	
Total decrease since Dec. 25, 1873	141,212	

Imports of Middlesborough pig-iron into Grangemouth:—
For the week ending July 11, 1874

For the week ending July 12, 1873

Increase

Total increase for 1874

The pig-iron market, in toning down to a more natural and healthy action, has been taken cognizance of by the members of the Stock Exchange, who are anxious that efficient measures should be taken not only to prevent gambling and fictitious transactions in stocks, but also in "everything else," pig-iron being specially designated. To regular dealers and merchants such a measure would prove of the greatest advantage, even though it would only partially protect the trade from the violent inroads made from time to time by moneyed outsiders, who only enter the market for the purpose of plunder. As it is, they are still large holders, and are unwilling to sell at present rates. Pig-iron is now becoming more steady in price, and although we do not look for a much further decline in quotations, they will undoubtedly be influenced by the natural demand. If large they cannot fail to advance, as the make is restricted, and the

stock in warehouse keepers' and makers' hands is much under the reserve stock of former years; while if our shipments had been equal to those of last year the reserve would have been swept away. The malleable iron trade is restricted to a few odd lots, and buyers have taken in some instances to ordering in cwt. The works will close to-morrow for a fortnight on account of the fair holidays, and it is to be hoped that at the end of that time there will be a sufficiency of work to set them all going. Prices are still ten-ling downwards.

The shipping trade in cwt. for the week is nearly up to the average, the quantity being 34,645 tons, against 35,502 tons in the same week of last year. Prices are being reduced to buyers, although the list price remains untouched, and as large quantities are being stocked, both at pits and depots, a further reduction is inevitable.

The colliers have, as a body, already lost something like 250,000*l.* in wages by their obstinacy, and the masters seem resolved that they shall either accept of their terms or lose another 250,000*l.* This course would mean starvation to many families, and privations to children and the infirm in cases too numerous to contemplate.

NORTH BRITISH ASSOCIATION OF GAS MANAGERS.—The thirteenth annual meeting of this association was held in the Andersonian University yesterday. Mr. William Foulis, president, in the chair. After some formal business had been disposed of papers were read “On a Self-acting Seal for Ascension Pipes, an Improvement in Hydraulic Mains,” by Mr. J. Alexander, Corstorphine; “On the Economic Results from the use of Revivified Lime in the Purification of Coal Gas,” by Mr. Joseph Gibb, Armath; “On a New Form of Slave Pump, specially adapted for Heavy or Thick Tar,” &c., by Mr. D. M. Nelson, Glasgow; “On an Improved Hydraulic Dip Pipe,” by Mr. George Boyd, Alloa; and “On Stoppages in Ascension and other Pipes; their Causes, Remedies, and Relative Advantages,” by Mr. A. Malam, Dumfries. At the close of the reading of the papers the meeting adjourned until five o'clock this afternoon, at which hour a lecture was delivered “On the Influence of Pressure on the Photogenic Value of Coal Gas, and on a New System of Photometry,” by Dr. William Wallace, gas examiner for the City of Glasgow.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

July 16.—The South Staffordshire iron trade is in a very languid state, although some improvement is experienced in the demand for certain classes of finished iron since the leading firms have restored their prices to something like uniformity. Earl Dudley quotes bars 12*s.* 12*s.* 6*d.* and other classes of finished iron in proportion. All the other leading firms quote bars 12*s.* per ton. The revised list of Messrs. Barrows and Sons (Tipton) has been issued. Plating bars are 12*s.* 10*s.* gas strip 11*s.* 10*s.* hoops 13*s.* singles 14*s.* boiler plates 14*s.* and boiler strips 15*s.* per ton. The second-class firms have not made any further reduction in their prices, nor is it likely that any change will be made until coal is lower. Common bars are 10*s.* to 10*s.* 10*s.* per ton, and common sheets 13*s.* to 13*s.* 10*s.* Sheets and plates are in steady demand than any other classes of finished iron. The operations at the mills and forges have been very restricted this week, not merely by the scarcity of orders but also by the intense heat of the weather. Pigs are 3*s.* to 3*s.* 5*d.* for common cinder, 5*s.* 10*s.* to 5*s.* 15*s.* for best all-mine, and 6*s.* for Staffordshire gray forge. The number of furnaces blowing in the district is 4*s.* out of 15*s.* built, but an increase is likely to be made in the number in operation.

The South Staffordshire coal trade is without much actual change, but the prospects are more encouraging now that the wearisome labour dispute is settled. It will be some little time before the effect of the settlement is felt in the iron trade and other great coal-consuming industries, as the closing of collieries for so long a time will necessitate repairs to plant and machinery, the re-opening of obstructed gate-roads and other preliminaries to a general resumption of operations. The price of coal remains upon the basis of 14*s.* 6*d.* to 18*s.* per ton for forge qualities.

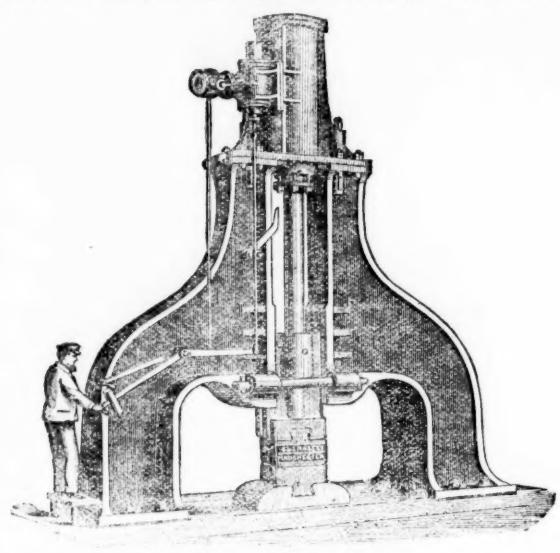
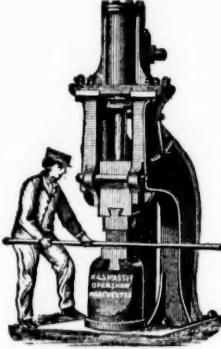
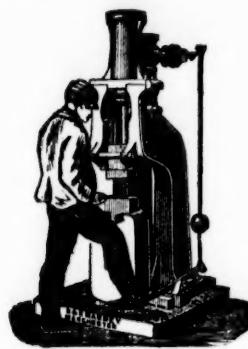
The Lyndon Colliery, West Bromwich (South Staffordshire Collieries Company), was formally opened on Monday, by Sir W. Brett, Chairman of the directors. The estate consists of 93 acres of Thick-coal, 72 acres of which are in a maiden state, and the remainder is very partially worked. Besides the Thick (10 yard) coal, the estate has been proved to contain the Brooch coal, Heathen coal, New Mine coal, Bottom coal, and Fire-clay coal. Two shafts have been sunk to the Thick coal, which lies at a depth of 170 yards. The machinery and plant are of a very high order, and include all the latest and most approved features. A pair of horizontal engines (80-horse power) are by Messrs. Burr and Lewis, London. They have 22-inch cylinders, 4 ft. 6 in. stroke, balance slide valves, link-motion reversing gear, and 10 ft. 6 in. drum. The boilers are cylindrical and egg-ended, without inside tubes, the latter being omitted because of their liability in this district to crustation. The pit frames, designed by Mr. Elijah Davies, Dudley, are 33 ft. high, with 12-ft. wheels, and have galleries round the top for the safety of the men when roping the pulleys. The formal opening of the colliery on Monday was witnessed by Admiral Sir Wm. Hall and Messrs. W. Metcalf, E. Hooper, H. Lancaster, E. H. Braithwaite, and other influential shareholders.

The shareholders of the Sandwell Park Colliery Company held an extraordinary general meeting in Birmingham on Wednesday for the purpose of considering a scheme for subdividing the shares and fixing and increasing the capital of the company and other business. Mr. P. D. Bennett presided. The report of the directors set forth that the primary object of the company was to ascertain the existence or otherwise of workable coal beyond the known limits of the South Staffordshire coal field

B. & S. MASSEY, OPENSHAW, MANCHESTER.

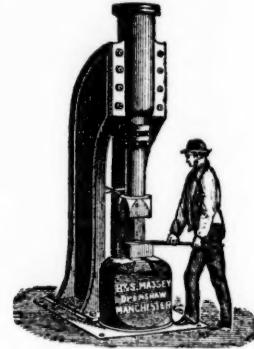
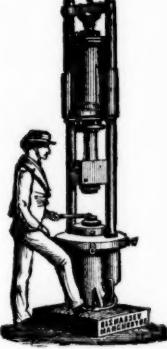
PRIZE MEDALS AWARDED:—Paris, 1867 Havre, 1868; Highland Society, 1870; Liverpool, 1871; Moscow, 1872; Vienna, 1873.

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VALVELESS ENGINES, AIR-COMPRESSORS FOR COLLIERIES AND PUMPS,

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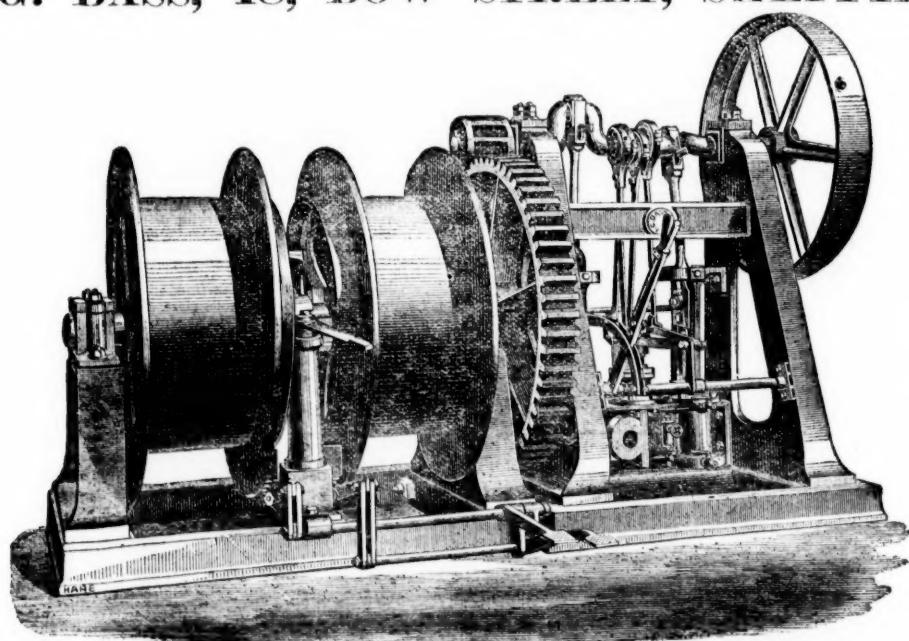
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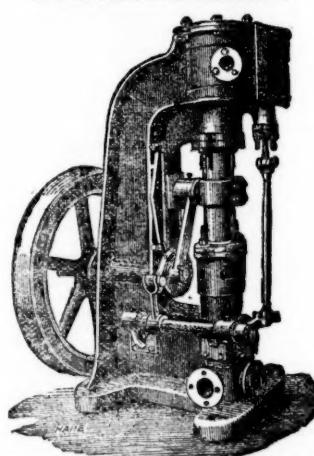
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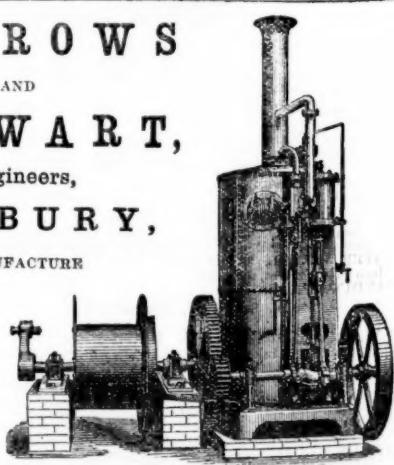
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These are all high-class inventions, and are with
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CIRCULARS ON APPLICATION.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.	Total divs.	Pershare.	Last paid
1500 Alderley Edge, c, Cheshire*	10 0 0	—	12 1 8	0 5 0	Apr. 1874		
2000 Alt-y-Crib, t, Illogan*	2 0 0	—	0 0 6	0 0 6	Feb. 1873		
20000 Bampfylde, c, s, mn, Devon*	1 0 0	—	5 1/2	5 1/2	June 1873		
5500 Blaen Cefnol, s, t, Cardigan* (24 sh.)	2 10 0	—	0 10 9	—			
12000 Bawdswell Downs, t, c, St. Just*	3 0 0	—	0 5 6	0 2 0	Oct. 1871		
2000 Bawdswell, t, c, St. Just	115 5 0	45	40 45	619 15 0	5 0 0	Aug. 1872	
5000 Bronfydd, t, s, l, (23000 Deb. B.8p. ct.)	100 0 0	—	110 0 0	2	Jan. 1872		
4000 Brookwood, c, Buckfastleigh	1 18 0	—	2 14 6	0 8 0	Nov. 1873		
3348 Cargill, s, t, Newlyn	5 0 5	2 1/2	2 2 1/2	4 16 3	0 12 6	Oct. 1872	
6400 Cashwell, t, c, Cumberland*	2 10 0	—	1 6 6	0 2 6	Aug. 1873		
7500 Castle-an-Dinas, t, St. Columb*	2 0 0	—	0 10 0	0 2 0	July 1873		
10000 Cawr Euan, c, t, Illogan	35 0 0	69	62 1/2	35 0 0	1 0 0	Feb. 1874	
4000 Cuth, & Jane, t, Penrhyneddinrath	5 0 0	—	0 7 6	0 7 6	June 1873		
2450 Cook's Kitchen, t, Illogan	24 4 9	13	11 12	11 17 0	0 7 6	June 1873	
10249 Devon Gt. Consol., c, Tavistock* ^t	1 0 0	—	116 10 0	0 12 0	May 1872		
4296 Dolcoath, c, t, Camborne	10 14 10	50	46 45	104 14 2	0 10 6	July 1874	
6144 East Cadron, c, St. Cleer	1 0 0	—	0 2 11	0 8 0	Feb. 1874		
800 East Darren, t, c, Cardiganshire	2 14 6	1 1/2	1 1 1/2	14 19 0	0 2 0	Oct. 1872	
8400 East Easton, t, c, Illogan	32 0 0	—	222 10 0	0 1 0	May 1874		
6400 East Easton, t, c, Illogan	6 0 9	10 1/2	9 10	13 11 0	0 2 6	May 1875	
1900 East Wheal Lovell, t, Wendron* ^t	5 19 0	13	12 12 1/2	20 0 0	0 7 6	July 1874	
8000 Exmouth, s, t, Christow	0 7 6	—	0 1 0	0 1 0	May 1873		
2800 Foxdale, t, Isle of Man*	25 0 0	—	80 15 0	0 10 0	Sept. 1872		
4000 Glasgow Cara, c, (30000 El p., 10,000 15s. p.)	1	—	0 4 10 0	0 1 0	Sept. 1873		
15000 Great Laxey, t, Isle of Man*	4 0 0	12	11 1/2	16 17 0	0 6 0	Apr. 1874	
25000 Great West Van, t, Cardigan*	2 0 0	—	0 1 0	0 1 0	Sept. 1873		
3508 Great Wheal Vor, t, c, Helston	40 15 0	—	15 19 0	0 2 6	June 1872		
6400 Green Hurlth, t, Durham*	0 6 6	5 1/2	5 1/2	1 8 0	0 4 0	May 1874	
20000 Grogwinion, t, Cardigan*	9 0 0	3 1/2	8 3 1/2	0 8 0	0 8 0	July 1874	
1024 Herodsfoot, t, near Liskeard	8 10 0	4	3 3 1/2	62 5 0	0 15 0	Oct. 1872	
25000 Killaloe, s, Tipperary	1 0 0	—	0 3 11 1/2	0 6 0	Mar. 1873		
4000 Llibarne, t, Cardiganshire	18 15 0	—	563 10 0	1 0 0	May 1874		
8120 Lovell, t, Wendron	0 10 0	—	0 16 7 0	0 1 6	Jan. 1873		
11000 Melindur Valley, t, Cardigan*	3 0 0	3 1/2	3 1/2	0 3 7 0	0 7 0	June 1874	
8000 Minera Mining Co., t, Wrexham*	5 0 0	26	20 25	63 11 0	8 0 2 0	May 1874	
80000 Mining Co. of Ireland, cl, c, t*	7 0 0	6 1/2	6 1/2	0 8 0	0 3 6	July 1872	
12000 North Hendre, t, Wales	2 10 0	—	0 15 0	0 2 6	June 1874		
2000 North Levant, t, c, St. Just	11 9 5	3 1/2	2 1/2	4 13 0	0 12 0	Sept. 1873	
7000 Old Treburchett, s, t, ordinary shares	1 0 0	—	0 10 0	0 10 0	Feb. 1874		
9000 Old Treburchett, s, t, (10 per cent. pref.)	10 0 0	—	0 10 0	0 10 0	Nov. 1871		
4004 Pedn-an-drea, t, Redruth	9 2 0	—	0 5 0	0 5 0	Nov. 1874		
8000 Penhalls, t, St. Agnes	8 0 0	2 1/2	2 2 1/2	3 8 0	0 2 0	July 1874	
80000 Penhale, t, c, Gwennap	2 0 0	—	0 1 0	0 1 0	Nov. 1873		
6000 Phoenix, t, L, Linkinhorne	4 13 4	8	2 1/2	39 10 10	0 4 0	Nov. 1872	
1772 Polherro, t, St. Agnes	15 0 0	—	0 1 12 6	0 5 0	Mar. 1872		
18000 Prince Patrick, s, t, Holywell	1 0 0	—	0 7 0	0 2 0	July 1874		
1120 Providence, t, Lelant (last call June 1874)	16 7	5 1/2	4 1/2	104 12 6	0 10 0	Sept. 1872	
20000 Roman Gravels, t, Salop	7 10 0	14 1/2	14 1/2	3 13 6	0 5 0	Apr. 1874	
10000 Skenfrith, t, St. Ainstell	1 0 0	—	0 1 0	0 1 0	Feb. 1872		
6000 Sliemford Dressing, t, Calstock*	1 0 0	—	0 1 1 0	0 1 1	Sept. 1872		
612 South Cadron, c, St. Cleer	1 5 0	80	90 05	715 0 0	2 0 0	July 1874	
6000 South Carnon, t, Illogan	1 17 6	3 1/2	3 1/2	0 10 0	0 2 6	July 1872	
6000 South Darren, t, Cardigan*	3 6 6	—	1 1 6	0 1 6	Nov. 1870		
8771 St. Just Amalgamated, t*	8 10 0	—	0 9 0	0 4 0	Nov. 1871		
30000 Terrance, t, Salop*	6 0 0	—	0 3 0	0 1 6	Oct. 1872		
6000 Tincroft, t, Pool, Illogan	9 0 0	34	32 33	47 3 6	0 5 0	May 1874	
4000 Trumpet Consols, t, Helston	6 5 0	1 1/2	13 1/2	9 11 0	0 10 0	Nov. 1872	
15000 Van, t, Llanidloes*	4 5 0	27 1/2	29 1/2	12 19 0	0 10 0	July 1874	
30000 W. Chiverton, t, Perranzabuloe	10 0 0	24 1/2	24 1/2	62 10 0	0 5 0	June 1873	
2048 West Wheal Frances, t, Illogan	2 3 9	13	11 12	3 12 6	0 5 0	Oct. 1872	
512 Wheat Basset, t, Illogan	5 2 6	25	20 25	638 10 0	1 0 10 0	Aug. 1872	
4298 Wheat Kitty, t, St. Agnes	5 4 6	8	7 7 1/2	11 14 6	0 3 0	May 1874	
896 Wheat Margaret, t, L, Illogan	16 17 6	13 1/2	13 1/2	82 2 3	0 10 0	May 1872	
10000 Wheat Mary, t, St. Denes*	6 0 0	—	0 1 0	0 1 0	Jan. 1873		
80 Wheal Owles, t, St. Just	78 5 0	100	80 85	522 10 0	4 0 0	Aug. 1872	
12000 Wheal Russell, t, Tavistock	1 0 0	—	0 2 9	0 0 9	Mar. 1873		
15000 Wheal Tregoss, t, Roche	1 0 0	—	0 1 0	0 1 0	Jan. 1873		
10000 Wheal Whisper, t, c, Warleggan*	1 0 0	—	0 1 6	0 0 6	May 1873		
25000 Wicklow, t, s, t, Wicklow	2 10 0	3 1/2	3 1/2	59 9 0	0 2 6	Mar. 1872	

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.	Last Call.
35500 Alamillos, t, Spain*	2 0 0	—	1 1/2	1 1/2	1 2 9 0
30000 Almada and Trito Consol., t*	1 0 0	—	4 4 1/2	4 4 1/2	2 0 0
20000 Australian, c, South Australia	7 7 6	1 1/2	11 1/2	11 1/2	0 2 0
10000 Battle Mountain, c, t (6240 part pd.)	5 0 0	—	10 0	10 0	0 10 0
15000 Birdseye Creek, g, California*	4 0 0	—	3 1/2	3 1/2	0 2 6
6000 Bensberg, t, Germany	10 0 0	—	0 17 4	0 8 0	0 10 0
12320 Burras Burn, c, So. Australia	5 0 0	27 1/2	26 27	16 15 0	0 10 0
20000 Cape Copper Mining, t, So. Africa	5 0 0	2 1/2	2 1/2	0 8 0	0 2 6
4000 Cedar Creek, g, California*	5 0 0	—	0 1 0	0 1 0	June 1873
8000 Central American Association*	15 0 0	—	0 1 0	0 1 0	Sept. 1873
15000 Chicago, t, Utah*	10 0 0	—	0 18 0	0 4 0	Sept. 1873
21612 Colorado Terrible, t, Colorado*	0 16 0	5 1/2	4 1/2	104 12 6	0 10 0
71612 Do Pedro North del Rey*	0 16 0	5 1/2	4 1/2	104 12 6	0 10 0
35000 El Dorado and Aurora, t, Nevada*	10 0 0	—	3 1/2	3 1/2	0 2 6
25522 Eldorado, g, New Scotia*	10 0 0	—	9 5 0	9 5 0	0 15 0
6000					